

THE CHEMIST AND DRUGGIST

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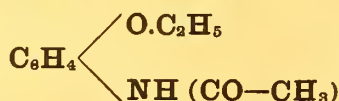
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IN HEALTHY PERSONS Phenacetine, according to Dr. Köbler, does not produce any ill-effects in doses from 0,5—0,7 grm. (8—12 grains); but in all cases of pyrexia even relatively small doses of 0,3 grm. (5 grains) are never without perceptible antipyretic effects. To adults it is best administered in single doses of 0,5—0,7 grm. (10—12 grains), instead of smaller ones given repeatedly; no disagreeable after effects, such as nausea, vomiting, or cyanosis, were ever observed in 50 cases presenting various febrile conditions. On the contrary, at fever temperatures of 39,5—40,5 C. (103,1—104,8 F.) a reduction of 1,5—2,5 C. (2,7—4,5 F.) invariably ensued; the reduction is usually gradual, reaching its maximum in 4—6 hours, the rise is likewise gradual, extending over 8—10 hours. Decrease of temperature (Apyrexia) is usually obtained without sweat secretions, but the pulse improves and a pronounced euphoria ensues.

Phenacetine does not cause any disagreeable symptoms in healthy persons even in doses of 1—2 grm. (16—32 grains); in 20 cases (12 adults and 8 children) in which it was administered it proved to be a quickly and energetically acting antipyretic. Nausea, vomiting, cyanosis, collapse, or other disagreeable after effects never occur. Dr. Hoppe fully confirms Dr. Kobler's statement as to the gradual fall and very slow rise of fever temperatures. Both investigators agree that Phenacetine produces **Apyrexia** as surely as any other antipyretic.

FOR CHILDREN.—In eight cases reported upon by Dr. Hoppe, Phenacetine acted energetically as an antipyretic on children in doses of 0,2—0,4 grm. (3½—7 grains) without causing any disagreeable symptoms, and Dr. Sluyter in Germany has recently given it to young children in doses of 0,5 grm. (8 grains); he obtained by its administration not only the desired antipyretic effect, but also a condition of evident comfort and quiet.

NEURALGIA.—Besides its antipyretic effects, it possesses eminently antineuralgic properties. Dr. Hoppe published 15 cases of severe cephalalgia and megrim, where Phenacetine produced an effect which was most beneficial at the same time, most astonishing. It should also be mentioned that Phenacetine was of special value in a case which had previously, but unsuccessfully, been treated by Antifebrin and Antipyrin. In such larger doses as 1—2 grm. (16—32 grains) given several times a day, Dr. Hoppe has found Phenacetine to be an excellent antineuralgic; it does not act quickly, but surely (generally in 1—2 hours), without causing any ill effects. On this point Dr. Heusner also says:—

"Phenacetine promises to become a most valuable addition to therapeutic agents, owing to its beneficial influence on the nervous system. It is not a narcotic like morphia, but acts, as Dr. Hoppe also observes, similarly to Antipyrin, and is more comforting and pain-allaying. Its wonderful anodyne effect is shown in cases of neuralgia and other derangement of the nervous system arising from reflectant irritation or general nervousness. I have prescribed it almost daily in megrim, gastralgia, ischias, insomnia, &c., caused by diseases of the uterus, the kidneys, or by overwork, &c., and have frequently heard it highly and enthusiastically praised. In insomnia caused by over-work and nervous excitement I myself have taken doses of 1 grm. (16 grains) with the best result. Phenacetine, contrary to quinine, bromide of potassium, and narcotics proper, does not cause lassitude or other disagreeable symptoms, and is easily taken on account of its tastelessness. As it promises to become an important remedy in many hysterical, neuralgic, and other nervous disorders, I do not hesitate to predict for it in this respect a distinguished place among therapeutic agents."

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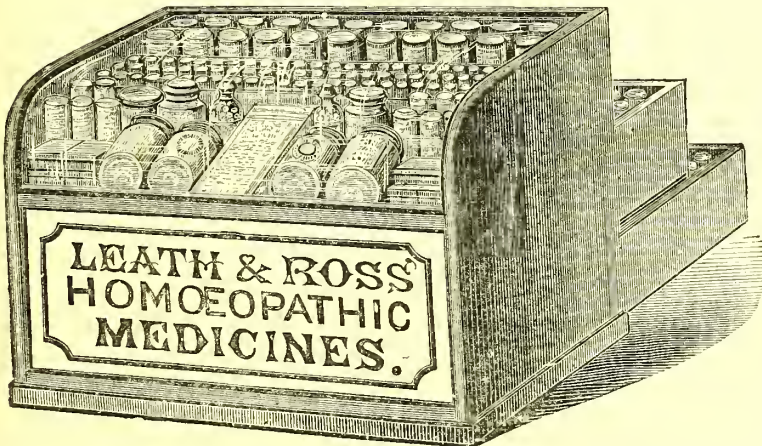
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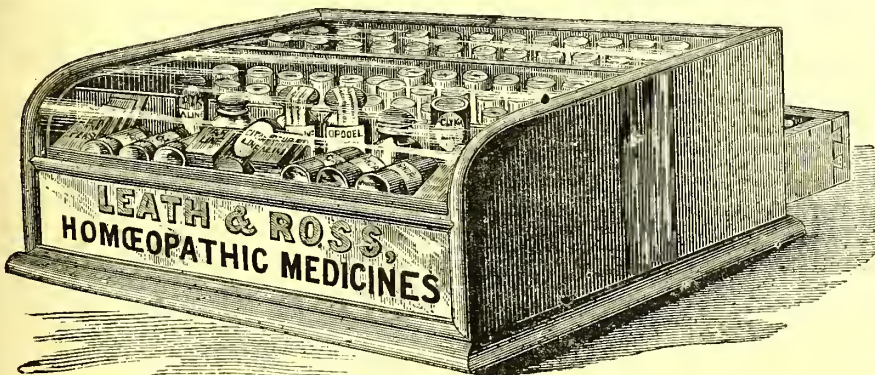
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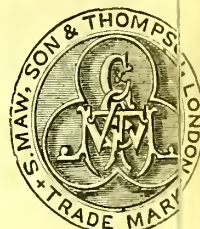
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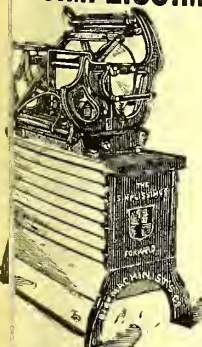
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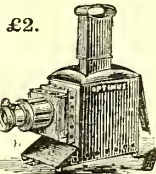
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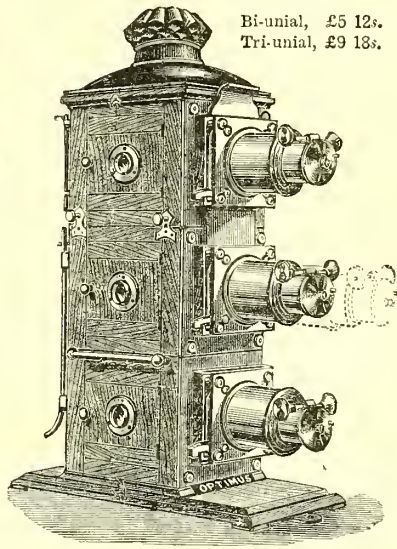
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FOR DISPOSAL.

Apparatus.

Stomach-pump and tubes complete, with flute key in mahogany case, made by Wood, Manchester, as good as new, only 22s. 6d. cash, worth 2l. 2s. JONES, Apothecaries' Hall, Llanrwst.

Formulæ.

Reliable recipes, 6d. each; full set of 130, neatly copied in book, 7s. 6d.; send for list. "Chemist," Edwards, Wye, Kent.

Enormous reduction.—Brooks's reliable recipes will now be 7d. each, 3 for 1s. 6d., 12 for 5s., post free; full instructions. Following recommended as trial: "Tic Specific," "Corn Cure," "Glycerine Cream," "Rheumatic Embrocation," "Liver Pills," "Blood Cleanser," "Liq. Copaiba," &c., "Ringworm Specific," "Liq. Santal. Flav.," &c., "Jubilee Sance," "Cold Cream," "Hop Tonic," "Toothache Remedy," "Fururiture Cream," "Brass Paste," "Brush Polish," "Nursery Pomade," &c. List free. T. Brooks, Chemist, Louth.

Drugs and Chemicals.

1 gall. ol. crotonis; any offer accepted. Boutal, 52 Marchmont Street, Russell Square, W.C. Surplus stock of chiretta, casium cocculus Ind., catechu, quassia, calami aromati, Iceland moss, all powdered, in small quantities under 20 lbs.; price reasonable to a buyer. H. Gibbon, 17 Murray Road, Finsbury Park, London, N.

Literature.

Offers wanted for *Pharmaceutical Journal*, either the lot or singly, from 83 to present date; also the current numbers to end of present year. Thomas, Hampton.

Educational.

"Public School Latin Primer," new; cost 3s., take 1s. Davey, Spilsby, Lincs.

Shop Fittings.

Counter scales, fig. 4 Maw, with weights complete, price 25s.; one pint Eguisier's Irragateur, fig. 18 Maw, price 12s. Lawrence, Peck, Isle of Man.

Nest of 42 mahogany-fronted drawers, 6 feet 6 by 4 feet 4, gold labelled, with three lockers under and mahogany coverboard over drawers, 3l. 3s. Kitson, Chemist, Worcester.

For sale.—16 5-oz. narrow mouth (recess and photo labels) round shop bottles; 20 5-oz. wide ditto; 10 5-oz. pink recess jars (lined), dome tops, photo labels; 16 10-oz. ditto; 16 2-oz. ditto. Price and list of labels on application to F. J. Holdercroft, Chemist, Church Street, Malvern.

Mahogany-fronted 1 drawers, gold labels, glass knobs, secondhand, in nests, 6 ft., 8 ft., 9 ft., 12 ft. long; mahogany-fronted shaving, wall-cases, counter-cases, from 10s. each; mahogany-top counters, panelled fronts, 5s. per foot; six 6-gallon carboys, 10s. each; two 8-gallon ditto, cut stoppers, on stands, 15s. each; one 10-gallon ditto, 18s.; dispensing screens, blue ointment jars, bottles, desks, &c., &c., to be sold very cheap. Note the address, Natali Bros., 45 Old Street, Goswell Road, London, E.C.

For sale.—Complete fixtures of chemist's shop, comprising:—2 counters (Spanish mahogany tops); 1 upright, 3 beat glass counter-cases; dispensing screen with English-made clock set in handsome carving; large wall case with 6 glass doors; nest of drawers (12 ft. 8 in.), mahogany fronts, glass knobs, containing 60 small, 21 large lockers underneath; shop rounds, ointment, pill and extract jars, &c.; 1 specie jar, 2 carboys, mortar outside, well fitted and in good condition; must be sold in one lot; no reasonable offer refused. Caley, 109 Derby Road, Liverpool.

Soda-water Machinery

No. 1 Mondolot's soda-water machine a double filler for syphons and bottles, all in good condition, can be seen working, sold on a lease room for larger plant. Williams, Arshot.

Miscellaneous.

About 1 cwt. good Coslin giuger, partially crushed; no reasonable offer refused. Jones, 406 Caleonian Road, N.

Microscopic slides; 5s. dozen; including precious polarising and brilliant opaque objects; lists. Henry Ebbage, 344 Caldon Road, London.

WANTED.

2-grain pill-machine, Marshall, 5 Pimlico Road. Disarticulated skull; cash or exchange, garden, High Street, Notting Hill, W.

1-grain pill-machine, and suppository-mold for making 12. Corbett & Wyatt, Chemists, Stourbridge.

Tincture-press, 2 or 4 pint, in good working order, and cheap for cash. Peacock, Chemist, Sunderland.

Glass show jars, suitable for sweets, &c. Particulars and price to Hodson, Wholesale Confectioner, Barrow-in-Furness.

Old gold, platinum, silver, or dental metal; utmost value in cash, or high-class mechanical work. Entwistle, Dentist, Shawtree, Liverpool.

Black bottles for shop use, one dozen more, 17 in. in circumference, 13½ in. tall, assuring to top of cap. A apply, giving lowest price, 60/40.

Full set chemist's fixtures, must be mahogany; also stoppered rounds with glass labels; fixtures wanted for a shop 18 ft. 16 ft. Particulars, T. W. Robinson, Chemist, Myton Place, Hull.

BEAUTY! BEAUTY! BEAUTY!

TOILET SPECIALITIES.

REGISTERED



TRADE MARK.

DIANE DE POITIERS.

Pommade de Diane de Poitiers

Crème de Diane de Poitiers

Savon de Diane de Poitiers

Poudre de Diane de Poitiers

Eau Dentifrice de Diane de Poitiers

Eau de Toilette de Diane de Poitiers

Eau Régénératrice de Diane de

Poitiers

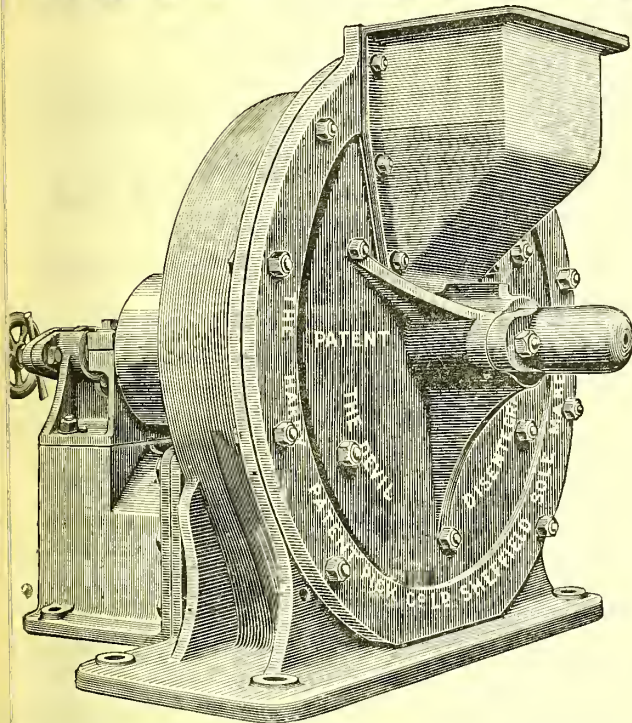
Eau Valentinoise de Diane de

Poitiers

A most attractive Counter Show. Sell readily. Liberal terms to Trade. Prices on application.

MARIE DU BOYER, 41 NEW BOND STREET, LONDON.

THE "DEVIL" DISINTEGRATOR



Will Grind, Granulate,
or Shred any Material,
Animal, Vegetable, or
Mineral.

The following is an unsolicited Testimonial from a firm of Dry Soap Manufacturers, who have tried various other makes of Disintegrators without success:—

“April 28, 1888.

“We are quite satisfied with your Machine, and in all probability will require another and larger one. Let us know the cost of one as large again as the one we have.”

The Machine referred to is one of our smallest Machines (price £30), and is grinding 2 to 3 tons of material per hour.

The following table gives some information as to the quantities of various classes of material the Machines will deal with per hour.

MATERIAL	No. 1 SIZE MACHINE	No. 2 SIZE MACHINE	No. 3 SIZE MACHINE
Coal Dust	10 cwt.	20 cwt.	50 cwt.
„ (for Briquettes)	20 „	40 „	200 „
Lead Ore	30 „	60 „	140 „
Slate	20 „	25 „	50 „
Bones (Dry) Fine	10 „	20 „	50 „
„ „ Medium	15 „	35 „	90 „
„ „ Coarse	20 „	40 „	110 „
„ (Green)	3 „	6 „	15 „
Hoofs and Horns	2½ „	8 „	20 „
Rags	—	2 „	5 „
Indian Corn	5 „	15 „	40 „
Wet Clay	—	20 „	50 „
Oak Bark	—	15 „	30 „

Purchasers should compare the quantities of material ground per hour with the capacity of other Machines. There is no other Grinder that will deal with anything like these quantities in the same time.

No.	PRICE	Belt required	Diameter of Pulley	Revolutions per Minute
1	£30	3 inches	8 inches	1,000
2	£60	5 „	12 „	900
3	£90	7 „	14 „	800

The chief feature of this Grinding Machine is that it combines the centrifugal with the grinding action, and it can be adjusted to grind to any degree of uniform fineness while in motion.

No Screens or Grates are required. Will Grind Wet or Dry Material, Clogging being impossible.

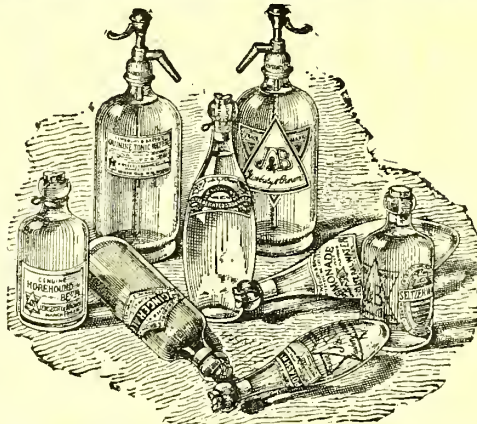
Soles of material forwarded to us may be passed through the Machine in the presence of intending purchasers or forwarded by rail.

SOLE MAKERS:

The **HARDY PATENT PICK CO., Ltd.**
Engineers and Mining Toolmakers, **SHEFFIELD.**

JEWSBURY & BROWN'S (MANCHESTER) SPARKLING TABLE WATERS, UNRIVALLED FOR PURITY AND QUALITY.

SODA WATER.
SELTZER WATER.
POTASH WATER.
LITHIA WATER.
SIMPLE
AERATED WATER.



LEMONADE.
GINGER ALE.
QUININE TONIC.
GINGER BEER
HOREHOUND BER.

EXTRACTS FROM ANALYTICAL REPORTS.

"The examination of the Waters which I have made has satisfied me that they have been prepared with the greatest care, and are of excellent quality."
FRANCIS JONES, F.R.S.E., F.C.S.
"On the whole, I have no hesitation in stating that your Aerated Waters are of the highest standard of purity which is practically attainable."
LOUIS SIEBOLD, F.I.C., F.C.S.

"The Lemonade is, for flavour and general excellence, superior to any similar compound which I have examined, and contains no acid but Citric Acid."
"I took a sample of the water used in your manufactory, in the preparation of the Aerated Waters, and found it, as was the case with the completed colounds, entirely free from lead, copper, or any injurious matter whatever."
C. ESCOFFIER, F.C.S., F.C.I.

J. & B.'s Syphons are mounted with PURE BLOCK TIN, thus ensuring absolute immunity from dangerous metallic contamination

113 MARKET STREET, and 44 DOWNING STREET, MANCHESTER.

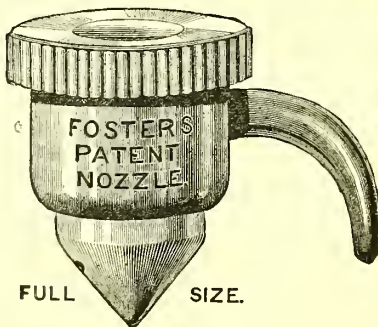
146 MINORIES, LONDON, E.C. BOXES BOTTLES, MACHINERY
New York ESSENCES
Sydney Catalogues, Circulars, Testimonials
Post free

SODA WATER MACHINERY

AND ALL ACCESSORIES FOR THE TRADE

BRATBY & HINCHLIFFE

HEAD OFFICE
SANDFORD ST. ANCOATS, MANCHESTER.



FIRE!! FIRE!! FOSTER'S PATENT NOZZLE

For Converting Syphon Bottles immediately into!
FIRE EXTINGUEURS
In Fancy Boxes containing 1 doz. Nozzles, 18/ each. Trade Discount, 33 1/2 percent.
Handsome Showcard and Handbills given gratuitously.
Every room in every house should have a Syphon Bottle fitted with a Nozzle, ready for immediate use. It forms the Simplest and most Reliable Fire Extingueur ever invented.

Price 1s. 6d. each.

BARNETT & FOSTER, Manufacturers,
"Niagara Works," 26th Eagle Wharf Road, LONDON, N.

BY ROYAL LETTERS PATENT.

HASSALL & CO.'S PHOSPHO-CITRIC ACID

Is the Best, Purest, and most Economical Agent for Acidulating all Saccharine Beverages.

Price only **10d.** per lb., in 9 and 18 gallon casks; **1s.** per lb. in small quantities.

One Ounce Measure is equal to One Ounce of Citric. It produces a higher class Beverage, and shows an economy of between £6 and £7 per cwt.

We do not ask for an order, we merely solicit the favour of a trial.

3-oz. Sample for Postage (3 stamps), or 14 lbs. on approbation.

PAMPHLET GRATIS.

UNSOLICITED TESTIMONIALS.

We are pleased to be able to testify that your Phospho-Citric Acid is satisfactory under the most severe trials. We have placed Manufactured goods in which your Acid was used in a refrigerator for months, and also for nine months in a stove in which the temperature stands at over 60° day and night, and the bottles when examined to-day were as bright as the day they were put in.

LEMON STREET, ABERDEEN.

I have pleasure in hearing testimony to the fact that first-class waters are produced, with greater body and finer fruity flavour, at half the cost of Citric; and further that your Acid is free from all traces of **LEAD**, generally found in the crystals.

I am persuaded that your Acid will ultimately command the Mineral Water Trade.

Yours faithfully, WM. THOMSON.

"And may I also be permitted to add my testimony to the excellence of your Phospho Citric Acid; I consider it far and away preferable to Citric."

C. H. ORTON, STORK GOLDING.

FERMENTATION.

When Fermentation is present, Saccharine Beverages made with this Acid will keep sound and bright several days longer than those made with Crystal Acids.

HASSALL & CO.

WORK ROAD, KING'S CROSS, LONDON.

TELEGRAMS:—"REMPUJARON LONDON."

TO THE
CHEMISTS & DRUGGISTS
 OF
GREAT BRITAIN.

TELEGRAPHIC ADDRESS: *St. George's, Middle St.,*
COLEMAN, *NORWICH,*
GEORGE'S, NORWICH. *December, 1887.*

The Excise Authorities having created a difficulty as to the sale of Medicated Wine containing a certain percentage of alcohol, we obtained in January last, from the Inland Revenue Authorities, permission to sell our Liebig's Extract of Meat and Malt Wine, **WITH QUININE**, without a Wine Licence, and many Chemists not holding a Wine Licence have sold considerable quantities. In order further to meet the requirements of the trade, we have introduced a Liebig's Extract of Meat and Malt Wine, **NON-Alcoholic**, made from the juice of the Grape, Liebig's Extract of Meat, and Extract of Malt. This also can be **SOLD WITHOUT A WINE LICENCE**. Your orders will oblige either direct or through the Wholesale Houses.

Yours obediently,

COLEMAN & CO., LIMITED.

*N.B.—The Wine is sold in Bottles, 2/9 and 4/6 each.
 Trade prices on application.*

P.S.—Where the Licence is not held we are willing to pay the entire cost of a Retail Licence (the holder of which can sell any kind of Wines) if an assorted order of 12 dozen is sent us of any of our preparations. List on application. Our Liebig's Extract of Meat and Malt Wine **WITHOUT QUININE** commands a very large sale, and is recommended by over one thousand medical men who have sent us testimonials in its favour.

SOLE MANUFACTURERS—

COLEMAN & CO., LIMITED,
 ST. GEORGE'S, NORWICH,
 AND 3 NEW LONDON STREET, LONDON, E.C.

KERFOOT'S
PEARL CACHOUS.

THESE beautiful little lozenges, perfectly spherical in form, weighing about 400 to the ounce, of exquisite flavour and great strength, are the most popular and perfect breath lozenges ever introduced; unlike the ordinary flat lozenges, these little PEARLS have no angles to attract dust and become soiled with a slight handling, consequently they can be carried in the purse or pocket, and are altogether more portable than ordinary lozenges.

The unique appearance and flavour of this novelty quickly ensured a large sale, and its success, as might have been anticipated, quickly brought to the front some worthless imitations, the sale of which can only result in disappointment to all concerned.

KERFOOT'S
Pearl Cachous

are the only genuine PEARL CACHOUS: they are not only better looking, but are double the strength of the imitations, and buyers are therefore requested to order the original, and thus ensure a perfect article. They are elegantly put up in attractive one-pound bottles, and are an ornament to any Pharmacy. The following flavours are always in stock—

Rose	Jockey Club
Musk	Violet
Ess. Bouquet	Rondoliti
Lavender	Clove Pink

Price 2s. 9d. per lb. in 1-lb. bottles.

Eight bottles sent carriage free to any part of the Kingdom.

T. KERFOOT,
 MANUFACTURING PHARMACEUTICAL CHEMIST,
 Medlock Vale Works,
 LONDON ROAD, MANCHESTER.

EIGHT PRIZE MEDALS AWARDED.

**GOODALL'S
HOUSEHOLD SPECIALITIES.**

Yorkshire Relish

THE MOST DELICIOUS SAUCE IN THE WORLD.

To Chops and Steaks, Fish, &c., it is incomparable. In Bottles, 6d., 1s. and 2s. each.

CAUTION.—On each Yorkshire Relish Label is a Willow Pattern Plate and name, GOODALL, BACKHOUSE & Co. No other is genuine.

**Goodall's
Baking Powder**

THE BEST IN THE WORLD.

Makes delicious Puddings without Eggs, Pastry without Butter, and beautiful light Bread without Yeast. In 1d. Packets; 6d., 1s., 2s., and 5s. Tins.

**Goodall's
Quinine Wine**

B.P.

The best, cheapest, and most agreeable tonic yet introduced. In Bottles, 6d., 1s., and 2s. each.

**Goodall's
Custard Powder**

For making delicious Custards without Eggs, in less time and at half the price. Sold in Boxes, 2d., 6d., and 1s. each.

**Goodall's
Blanc Mange Powder**

Is acknowledged by all to be the most convenient and economical preparation ever introduced, as, by its use, a most Rich and Delicious Blanc-mange may be produced in a few minutes at a trifling cost, and may be had of various flavours, i.e., Raspberry, Strawberry, Lemon, Almond, and Vanilla. Sold in Packets, 6d. and 1s. each.

**Goodall's
Egg Powder**

Acknowledged to be the only real substitute for eggs yet discovered. Its action on Oakes, Puddings, &c., &c., resembles that of the egg in every particular, enriching them in colour and flavour, rendering them most wholesome and nutritious. One sixpenny tin will go as far as twenty-five eggs. In 1d. Packets; 6d., 1s., 2s. Tins.

SOLE MANUFACTURERS—

GOODALL, BACKHOUSE & CO.
WHITE HORSE STREET, LEEDS.

A Monthly Price List of Druggists' Sundries, Patent Medicines, &c., can be had Post Free on application.

TYRER'S GOOD VALUE
SAUCES
AND
"BOROUGH" KETCHUP

THE GIANT 1d. BOTTLE OF SAUCE.
LARGEST IN THE TRADE.

In Half-Gross Boxes, at 6/6 per Gross.*

"BOROUGH" KETCHUP, WORCESTER, HARVEY, YORKSHIRE, OR READING SAUCE.

1d. Sample Bottles, dozen parcels	per gross	5/	extra quality	6/
1d. "Giant" Bottles, dozen parcels	"	5/6	"	6/6
1d. "Giant" Bottles, dozen parcels	"	6/	"	8/
1d. "Giant" Bottles, dozen parcels	"	6/6*	"	8/6
1d. Bottles (flat or round), reputed 1/2-pint	"	16/	"	24/
1d. Bottles (flat or round), reputed pint	"	25/	"	32/
1d. 1-pint Imperial Round Stoppered Bottles	"	30/	"	36/
1-pint Imperial	"	50/	"	60/
12 1/2-gallon Casks (casks free).. ..	each	20/	"	32/

ROYAL CAFÉ SAUCE.

In 8 oz. square-stoppered bottles, 48/ per gross.
A rich, fruity Sauce of fine flavour, and worth especial attention, as being the most saleable in the market.

Samples of any kind Sent Free of all Cost by

PETER TYRER,
The "Borough" Ketchup and Sauce Maker,
70 LONG LANE, BOROUGH, LONDON, S.E.

SCOTCH AGENCY: 113 WEST NILE STREET, GLASGOW.
Also Sold by W. & C. PANTIN, Upper Thames Street, LONDON, E.C.
BURGOYNE & CO., 16 Coleman Street, London, E.C.
JOS. TRAVERS & SONS, 119 Cannon Street, London, E.C.

**RIDGE'S
FOOD**

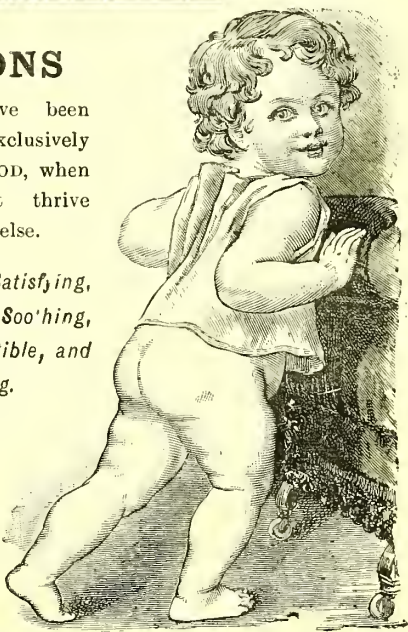
is the BEST,
and has the
LARGEST SALE
in the World
of any Infant's
Food.

MILLIONS
of Children have been brought up exclusively upon RIDGE'S FOOD, when they could not thrive on anything else.

RIDGE'S FOOD is Satisfying, Strengthening, Soo'ing, Agreeable, Digestible, and Nourishing.

MANUFACTORY—
Ridge's Royal Food Mills, London, N.

Telegraphic Address—
"RIDGE'S FOOD LONDON."



Ridge's Food sets the babies on their legs, and makes them push along.

RANDALL'S BLACK CURRANT LOZENGES

Plain Black Currant, old square 2/6
 Plain Black Currant, rough oval 2/6
 Black Currant and Ipecacuanha 2/6
 Black Currant and Tannia .. 3/

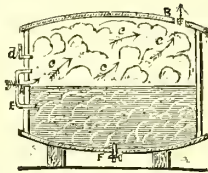
Black Currant Voice (warm astringent) 3/
 Black Currant Cough Lozenges* 3/6
 *Ipecac. & Morph., strength as "B.P."

In Bottles, 1-lb., 2-lb., 4-lb., and 7-lb. For Exportation, in Soldered Tins, of any size. From EDWARDS, London, or SANGER & SONS; through any Wholesale House; and from the Manufacturers,

RANDALL & SON, SOUTHAMPTON,
 Who will forward Samples by post on application.

Also Brown Cough Lozenges, 2/; 7 lbs. stamped with name free, and Musk Lozenges (Special), 2/6.

N.B.—Medical Lozenges of every kind, including those of the Pharmacopœia of the Hospital for Diseases of the Throat, London, made with Black or Red Currant.



NEW METHOD OF MAKING VINEGAR, BY THE REVOLVING APPARATUS (Michaelis' Patent).

For further particulars

See the Chemists' and Druggists' Diary, 1884, page 274,
 OR APPLY TO

PAUL ROTHERMEL,
 105 (late of 27) LEADENHALL ST., LONDON

TEMPERANCE BEVERAGES.

A Sixpenny Bottle of

ADAMS'S EXTRACT OF HERBS

Will make 8 gallons of sparkling, wholesome, and refreshing

PRIME HERB OR BOTANIC BEER

Unequaled in strength and richness of flavour by any preparation made from fresh herbs.

The Extract is very carefully manufactured, on the most improved scientific principles, from the herbs and plants gathered and dried at the proper season, when their virtues are in full vigour, thus retaining their invigorating and health-giving properties.

It makes an excellent beverage, giving natural flavour and colour and a sparkling foam like bottled ale.

In Bottles, 6d. to make 8 gals.; 1s. to make 18 gals.; a 2s. 6d. to make 50 gals.

ADAMS'S GINGER ALE ESSENCE

makes a sparkling, refreshing, and invigorating beverage for summer and winter.

ADAMS'S SPARKLING FOAM PRODUCER.

One tablespoonful added to 2 gallons of the Herb Beer or Ginger Ale, just before bottling, gives a creamy foam like bottled ale.

Wholesale Agents,

W. EDWARDS & SONS, Queen Victoria St., London.

Specially favourable terms to large Buyers from the PROPRIETOR,

B. ADAMS, Mansfield, Notts.

NESTLE'S MILK FOOD FOR INFANTS.

ALSO WELL ADAPTED FOR CHILDREN AND INVALIDS.

Prepared at VEVEY, SWITZERLAND.



The only Perfect Supplement and Substitute for Mother's Milk.

Easy of Preparation—requires merely the addition of water.

UNIVERSALLY RECOMMENDED BY PHYSICIANS.

To H.R.H. The Prince of Wales, The Empress of Germany, &c.

BRAND & CO.'S
PEPTONES
 OF
BEEF,
MUTTON,
VEAL,
 AND
CHICKEN.

BRAND & CO'S
SPECIALTIES FOR INVALIDS
 CONCENTRATED
 BEEF TEA, VEAL,
 MUTTON & CHICKEN BROTHS;
 TURTLE SOUP & JELLY, CALF'S FOOT
 SOLE ADDRESS,
 JELLY, MEAT LOZENGES 11 LITTLE STANHOPE STREET, MAYFAIR, W.

HOLBROOK'S WORCESTERSHIRE SAUCE

HOLBROOK'S LONDON RELISH

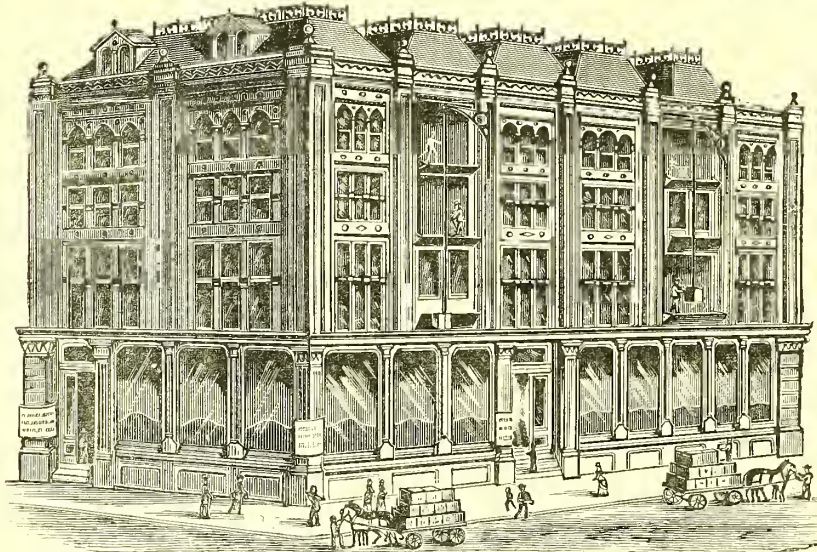
HOLBROOK'S PURE PICKLES

THE BIRMINGHAM VINEGAR BREWERY COMPANY,
*Limited, have for many years been the Sole Manufacturers
of these articles.*

*The attention of the Company having been drawn to
certain advertisements and other documents which have
been circulated in the Trade, that the Public are invited
to purchase these articles from persons other than the
BIRMINGHAM VINEGAR BREWERY COMPANY, Limited, the
BIRMINGHAM VINEGAR BREWERY COMPANY, Limited, have
already commenced legal proceedings to protect the
exclusive rights which they claim to these articles. The
Public and the Trade are warned that any of the above
articles purchased under this Brand from any Manufac-
turers except the BIRMINGHAM VINEGAR BREWERY
COMPANY, Limited, will not only be spurious, but may
expose the person retailing the same to the risk of being
made Defendant to legal proceedings.*

HESELTINE'S

THE PREMIER TEA OF INDIA AND CEYLON



OFFICES AND DUTY-PAID WAREHOUSES.

IS THEIR SPECIAL
IMPORTATION
AND THE PERFECTION
OF TEA.

“TAPRABUNDA”

REGISTERED TRADE MARK.

FOR RETAIL AT

1s. 8d., 2s., and 2s. 6

In Lead Packets, $\frac{1}{4}$ -lb., $\frac{1}{2}$ -lb., & 1-lb.

Terms of Agency, and Samples
the Tea, on application.

WM. HESELTINE & SON

56 Wilson Street, and 1 & 3 Earl Street, Finsbury, LONDON, E.C.

AGENTS WANTED WHERE NOT ALREADY REPRESENTED.

DESIRABLE & PROFITABLE AGENCY FOR CHEMISTS.

SPRING BLOSSOM CEYLON TEA

Packed in three qualities, in handsome and attractive packages, and sent out in cases containing 40 lbs. each, to hold one size only, either 1 lb. $\frac{1}{2}$ lb., or $\frac{1}{4}$ lb. Air-tight Tin Canisters, to sell retail at 2s., 2s. 6d., and 3s. per lb. Quarter Pound Samples on receipt of Stamps.

Terms—Cash, less discount of 3d. in the £, carriage paid, or Two months net on receipt of satisfactory London references

Our Fortnightly Price Current Post Free on application.

CAVE, JOHNSON & CO., WHOLESALE TEA AND COFFEE DEALERS, 8 LIME ST., LONDON, E.C

BANKERS—WILLIAMS, DEACON & CO.

[2]

N.B.—This Tea being packed in Air-tight Tin Canisters is not liable to be deteriorated by the flavour of any other foreign substance

PRIZE MEDAL, International Health Exhibition, 1884. AWARD OF MERIT, International Medical and Sanitary Exhibition, London, 1881.

DIABETES.

VAN ABBOTT'S GLUTEN BREAD,

AND ALL SUITABLE FOODS FOR DIABETIC PATIENTS.

VAN ABBOTT'S ELIXIR of SACCHARIN and SACCHARIN PERLES for SWEETENING TEA, COFFEE, &c., are perfectly harmless to DIABETICS and all to whom Sugar is injurious.

G. VAN ABBOTT & SON are Manufacturing GLUTEN CAKES, BISCUITS, &c., SWEETENED with SACCHARIN for DIABETIC PATIENTS.

Full particulars on application. PAMPHLET, with DIABETIC and other DIETARY TABLES, COOKING RECEIPTS, Price List, &c., Post Free.

G. VAN ABBOTT & SON,

DIABETIC, INVALID, & INFANT DIETETIC DEPOT, 6 Duke St. Mansions, Grosvenor Sq., London, W.

TELEGRAPHIC ADDRESS—"GLUTENS LONDON."

TOWER TEA.

INJUNCTION.

IN THE HIGH COURT OF JUSTICE, Chancery Division, on the 23rd July, 1887, the case of THE GREAT TOWER STREET TEA COMPANY, Limited, versus LANGFORD & CO., Plymouth, was decided. Mr. Justice Stirling (without calling upon Counsel for the Plaintiffs to reply) gave judgment in favour of The Great Tower Street Tea Company, Limited, and granted a Perpetual Injunction, with costs, restraining the Defendants from packing their Teas in the manner complained of, or in such way as would lead the public to suppose they were the Teas of the Plaintiffs.



Tower Tea

Registered Trade Marks, Nos. 44,027 and 43,992.

THE ABOVE TRADE MARKS APPEAR ON EVERY PACKAGE.

THE GREAT TOWER STREET TEA COMPANY, Limited, is resolved to protect its Agents in every part of the country, and has instructed its solicitors to proceed in the most peremptory manner against all persons infringing upon its rights. This valuable Agency is a certain source of income—the public ask for the Tea, and Chemist will improve their standing by pushing it.

TOWER TEA is a standard quality. It is widely advertised. Absolutely NO RISK to Agents.

APPLICATIONS FOR THE AGENCY for the Sale of Tower Tea will have prompt attention.

THE LONDON BROKEN TEA	for retail at	1/8
ASSAM CONGOU, New Season's Whole Leaf Tea	„	1/8
THE LONDON TWO-SHILLING TEA	„	2/0

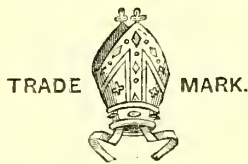
THE GREAT TOWER STREET TEA CO., LD.
3 JEWRY STREET, LONDON, E.C.

MITRE TEA.

COMFORT & PROLONG YOUR EXISTENCE

BY DRINKING

MITRE
TEA.



	<i>s. d.</i>
Mitre "Broken Leaf" 1 4	1 4
Mitre "Broken Am. Pekoe"	1 8
Mitre "Thrift" (whole leaf)	1 8
Mitre "Kee-Mun" ...	2 0
Mitre "Amgoorie" ...	2 6



MITRE
TEA



	<i>s. d.</i>
Mitre "Broken Leaf" 1 4	1 4
Mitre "Broken Am. Pekoe"	1 8
Mitre "Thrift" (whole leaf)	1 8
Mitre "Kee-Mun" ...	2 0
Mitre "Amgoorie" ...	2 6

Fac-Simile of Show Card distributed Gratis to all Agents.

Sold by Specially Selected Agents. Wrapped in $\frac{1}{4}$ -lb., $\frac{1}{2}$ -lb., & 1-lb. Parcels.

VALUABLE AGENCY.

Framed Show Cards, Enamelled Iron Tablets, Posters, Window Transfer, and Handbills with Agent's Name on supplied free. Newspaper and Railway Station Advertisements to suit the requirements of Agents. Applications for Agencies where unrepresented will receive prompt attention. Current and Pamphlet, with Terms, post free.

KEARLEY & TONGE, MITRE SQUARE, LONDON, E.C. 4.

DE JONG'S PURE SOLUBLE COCOA OR CHOCOLATE.

(PATENT 1887.)

A new and wonderfully Refreshing, Delicious, and Invigorating
Summer Drink, prepared in one minute from

DE JONG'S PURE SOLUBLE COCOA.

(The "Acme" of all Pure Cocoas.)

2-oz. Sample Tins, free of charge, on application by letter, from the

Chief Depot of De Jong's Cocoa, 6 & 7 Coleman St., London, E.C.

[ALL RIGHTS RESERVED.]

THIRTY-SIX PRIZE MEDALS AWARDED TO THE FIRM.

GOLD MEDALS
EDINBURGH AND LIVERPOOL EXHIBITIONS.

FRY'S Pure Concentrated COCOA



TRADE MARK.

Prepared by a new and special scientific process securing extreme solubility, and developing the finest flavour of the cocoa.

J.S. FRY & SONS, BRISTOL, LONDON, & SYDNEY, N.S.W.

ROBERT GIBSON & SONS,

MANUFACTURERS OF HIGH-CLASS LOZENGES OF EVERY DESCRIPTION,

JUJUBES, BOILED SUGARS, COMPRESSED PELLETS, &c., &c.

Shipped through London Houses to all parts of the World. Price Lists sent on application to the Works,

ESKINE STREET, HULME, MANCHESTER ENGLAND.
LONDON DEPOT-1 AUSTRALIAN AVENUE.

"AMORNIE." LIEBIG'S Extract of Meat.

As supplied to the War Office.

1-lb.	per lb.	6/2	per doz.	74/0	2-oz. Jars	per lb.	7/0	per doz.	10/6
1-lb.	"	6/4	"	38/0	1-oz. Jars	"	7/8	"	5/9
4-oz.	"	6/7	"	19/9	1/2-oz. Jars	"	8/0	"	3/0

Write for Detailed Price List to the Australian Meat Co., 9 and 11 Fenchurch Avenue E.C.

6 lbs. Carriage Free.

HAY'S HOP ALE ESSENCE

REGISTERED TRADE MARK.

FOR THE MANUFACTURE OF THE FINEST AERATED HOP ALE.

Is made from the Choicest Hops Grown.

HAY'S HOP ALE ESSENCE

"Supplies an excellent
stomachic, appetising, and
agreeable summer drink."

Brewers' Journal.

"A beautiful es-
sence, has a fine Hop
Aroma, and is quite a
pharmaceutical triumph."

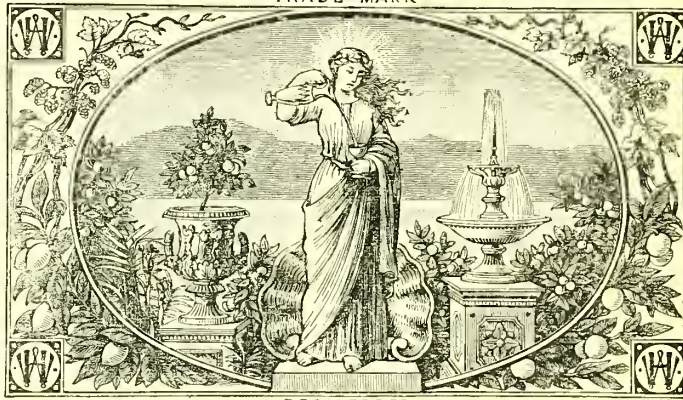
The Chemist and Druggist.

"For this Essence a bril-
liant future may be antici-
pated. It possesses charac-
teristics very seldom to be
met with."

Mineral Water Trade Review.

"For flavour, strength, and
real solubility, this Essence
leaves nothing to be desired."

British & Colonial Druggist.



TRADE MARK

REGISTERED.

HAY'S HOP ALE

"This is an excellent non-
Alcoholic beverage."

The Spectator.

"Evolves a delicious aroma
of Hops."

Medical Press.

"It is a Fine Beer
Beer, pouring out with a
rich creamy head."

British & Colonial Druggist.

"Possesses the aromatic
bouquet and pleasant flavour
of the genuine Hop
Mineral Water Trade Review.

"Is a nearer approach to
Bass or Allsopp's Ale than
any non-intoxicants ped-
dling it."

Eastern Morning Post.

Trade Price, 8s. 6d. per lb.; 12 lbs. and upwards, 8s.

Quantity required, two fluid oz. to each gallon of Syrup, making 106 10-oz. Bottles.

HAY'S HOP ALE ESSENCE

FOR THE MANUFACTURE OF THE FINEST AERATED HOP ALE.

"Since Mr. HAY, the well-known Manufacturing Chemist, of Hull, surprised the Pharmaceutical world, some ten years since, by the production of a beverage that, until then, had been thought an impossibility, viz., a perfectly soluble and transparent ESSENCE OF GINGER, nothing he has attracted so much attention in this direction as his latest ESSENCE OF HOPS, which, like his other Essences, is a production in itself. The HOP ALE made from this Essence evolves a DELICIOUS AROMA OF HOPS, and supplies that much long-desideratum of abstainers, 'A Glass of Non-Alcoholic Beer.' We have always felt that teetotalers laboured under a disadvantage that ought to be remedied, in having no really decent beverage in the place of Wine and Beer. By this Pharmaceutical triumph of Mr. HAY, this difficulty has been overcome, and it affords us much pleasure to commend this truly Temperance Drink to the notice of abstainers and non-alcoholic abstainers."

—*Medical Press.*

HAY'S HOP ALE ESSENCE

"I certainly remarkable for the purity and reality of its results. Made from the choicest hops, and treated in a manner of which Mr. HAY alone possesses the monopoly, this HOP ALE ESSENCE supplies an excellent stomachic, and an agreeable stimulating Summer Drink. The HOP ALE produced by this ESSENCE is of a most refreshing and invigorating character, with all the appetising flavour and delicate taste of its more intoxicating prototype, which it approximates more closely than any similar preparation we have yet tasted. It may be advantageously taken up as a speciality for which a large consumption may safely be predicted."—*Brewers' Journal.*

**W. HAY, Manufacturing Chemist, Beverley Road, HULL,
ENGLAND.**

Telephone Number, 1852.

Telegraphic Address—CHEMICUS LONDON.

ADVERTISERS' AND BUYERS' REFERENCE LIST AND INDEX TO ADVERTISEMENTS.

ADVERTISEMENTS APPEARING IN THIS ISSUE OF "THE CHEMIST AND DRUGGIST."

NOTE.—The Folios shown in this Index are those at the FOOT of the Page, and NOT at the Top. This arrangement is necessary in order to meet the requirements of the Post Office.

Table with three columns: Foot of Page, Foot of Page, Foot of Page. Lists various advertisers and their products, such as 'Extract of Herbs', 'Essence of Sassafras', 'Coca Wine', etc.

CLASSIFIED LIST OF ALL ADVERTISERS

Those whose Names do not appear above are published in one of the other issues of this month.

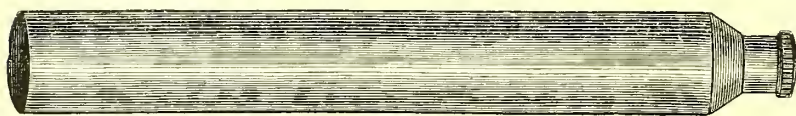
Classified list of advertisers categorized by product type: ACETIC ACID, AMMONIA, APPARATUS, BISMUTH, BLOOD MIXTURE, BOOKS, BUTTER COLE, CAMPHOR, etc.

H. BROOKS, PEEL & CO. [ESTD. 1840.]

COLLAPSIBLE TUBE MANUFACTURERS,

Patentees and Sole Manufacturers of the PORTABLE METAL SPRINKLER STOPPER, and Dealers in GLASS BOTTLES FOR PERFUMERS AND OTHERS.

Steam Factories: 31 Lyme Street, Camden Road (Offices), and Bartholomew Road, Kentish Town, London, W.



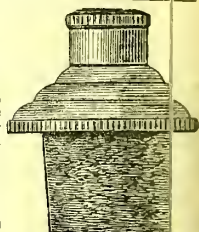
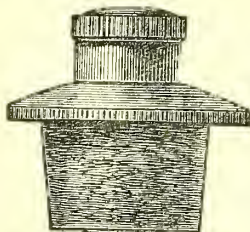
COLLAPSIBLE TUBES
OF ALL SIZES.

For Perfumes, Artists' Colours, Soaps, Cosmetics, Creams, Oils, Varnishes, &c. These Tubes are inexpensive and portable, and may be applied to many useful purposes besides those above-mentioned.

SOLE MANUFACTURERS AND PATENTEES OF

THE PORTABLE METAL SPRINKLER STOPPER,

With Cork fitted thereon for bottles of any size, and having apertures of various dimensions, especially adapted for Perfumes, Hair Washes, Lime and Glycerine Essences, &c. These handsome stoppers give a character and finish to the most ordinary bottles to which they may be applied. Gilt or plain; and put up if required in handsome glass lid boxes, suitable for shop counters and show cases, at moderate prices.



THE "TORSION" PATENT SPRINKLER

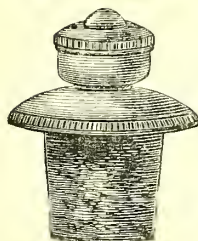
The two designs, Nos. 18A and 19A, are those to which we direct special attention, as sizes being in general use other sizes will follow promptly to meet all requirements, on which Caps with two or more holes will be introduced to meet the public taste.

Particular attention is called to the latest improvement in our Patent Metallic Stopper, the "Torsion." This New Stopper adheres to the design of the original patent, which has been universally acknowledged as an ornamental and inexpensive article for the Toilette, as possessing all the advantages of a "Permanent and Indestructible Stopper, suitable for Bottles of all Sizes and Shapes," with the additional security it affords, that the Cap can never be entirely unscrewed, consequently it cannot be lost. It is especially effective as a Sprinkler, while giving a more prompt and copious, yet economic, supply, through the improved action of the Cap. Such combined advantages, in an article of exquisite finish, have long been desired, and it is thus submitted for general approval, and its usefulness when tried will be appreciated by all.

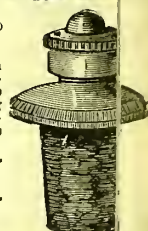
Illustrations, Price Lists, &c., can be had on application, or through any Wholesale House in town or country. All orders received direct will be promptly attended to.

CAUTION.—All Stoppers of our Manufacture are made of Pure Tin, and have the name of H. BROOKS & CO. stamped on the under side of the rim.

All Tubes are made of Pure Tin unless specially ordered of Mixed Metal, from the smallest size up to 13 in. by 2 1/2.



No. 1



No. 19A.

BETTS & CO., LIMITED

(ESTABLISHED IN 1840),

SOLE MAKERS IN GREAT BRITAIN OF

METALLIC CAPSULES,

AND PATENTEES OF THE

COLOURED SIDE MARK, LABEL, AND OTHER SPECIALITY CAPSULES

(For the Prevention of Fraud and Refilling of Old Labelled Bottles), as supplied to BASS & Co., HENNESSY AND MARTELL COGNAC, and the leading Brewers and Bottlers of Wines and Spirits throughout Europe.

PLAIN ORDINARY CAPSULES

For Small Phials, 2s. 6d. and upwards per 1,000, according to size, style, design, and quantity.

SPECIAL CONTRACTS FOR CONTINUOUS DEALING.

Manufacturers of Pure English-made Bottling and Package Tinfoil, from 1 lb. and upwards; Mixed Foil (Foreign Quality), from 6d. per lb. (according to gauge); Paint Barrel Packages and Snuff Canisters, Tea Packages, &c.

COLLAPSIBLE TUBES AND SPRINKLES
FOR PERFUMERS AND OTHERS.

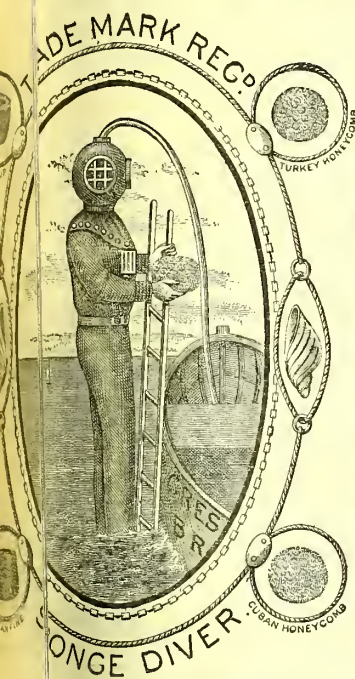
MANUFACTORIES:—LONDON: Chief Office and Factories, Wharf Road, City Road, E.C.; and Holloway and Batavia Mills, Holloway, N.W.—BIRMINGHAM: Moor Green Fields.—PARIS: Office, 65 Rue Verré.—BORDEAUX: Office, 3 Quai de Chartrons; Factory, Monrépos, Floirac.

PATENTEES OF HYDRAULIC & MECHANICAL PRESSURE CAPSULING MACHINES,

ESPECIALLY ADAPTED FOR CHEMISTS' COUNTERS.

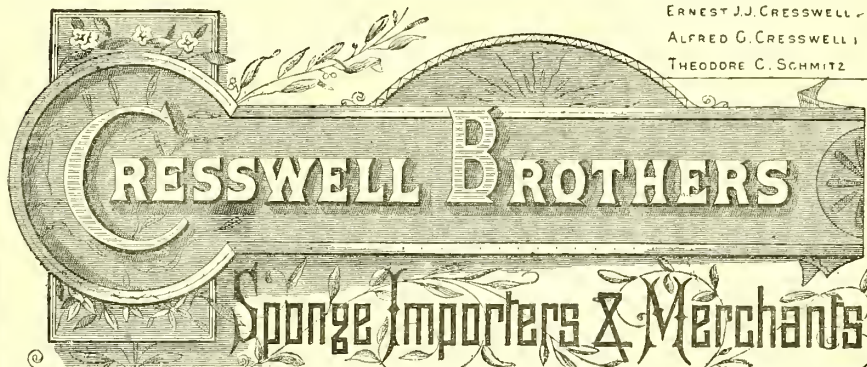
Largely in use by the Trade, and efficiency guaranteed for all sizes of Bottles, at Royalties from 5s. to £2 2s. per annum

HEAD-QUARTERS FOR SPONGES.



Telegraphic Address—"CUBANS LONDON."

FREDERIC CRESSWELL,
ERNEST J. J. CRESSWELL,
ALFRED G. CRESSWELL,
THEODORE C. SCHMITZ



SPONGES OF EVERY DESCRIPTION DIRECT FROM
GREECE, TURKEY, THE BAHAMAS, FLORIDA & CUBA

2, RED LION SQUARE, LONDON, W.C.

(Next to Church)

ALSO AT Nos. 1 & 13A RED LION SQUARE.

SPONGES FOR THE SUMMER SEASON.

CRESSWELL BROTHERS make a speciality of the best Toilet and Bath sponges, both bleached and unbleached, for Druggists. All buyers who require Sponges of good shape, good texture, and strong fibre will find that Cresswell Brothers' goods combine those characteristics. A considerable saving will be effected by dealing direct with Cresswell Brothers, as they are the only firm who can place their goods straight into the shop of the retailer from the hands of the fishermen.

SAMPLE CASES SENT ON APPROVAL.

Bleached Sponges are always sent, except when unbleached are specified, for it is found that Cresswell Brothers' bleached sponges wear as long as the unbleached, and are more saleable than the latter. Cresswell Brothers' process of cleaning does not injure the sponge. (Vide Pharm. Journal.)

Largest stock of unbleached sponges in cases, &c. 4,500 Cases received since January last.

Selling Establishments at Aegina & Hydra, Greece; Calymnos & Smyrna, Turkey; Nassau, Bahama Islands; & Key West, Florida.

SOLE AGENTS FOR THE CUBAN SPONGE FISHING COMPANY.

Branches at 3 ALBION CRESCENT, GLASGOW; 11 WETERINGSTRAAT, AMSTERDAM.

GOVERNMENT CONTRACTORS.

AGENCIES IN ALL THE MOST IMPORTANT EUROPEAN AND COLONIAL CENTRES.

WRITE for NEW EDITION of ILLUSTRATED PRICE LIST.

CRESSWELL BROTHERS, 1 & 2 Red Lion Sq. (next to Church), LONDON, W.C.

No connection with a Company trading under a similar name in the same square.

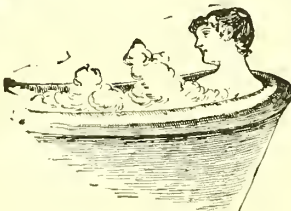
CAUTION. A. S. LLOYD'S EUXESIS, FOR SHAVING WITHOUT SOAP, WATER, OR BRUSH.

The GENUINE Euxesis bears the following distinctive marks:—

- 1.—My full name AIMEE LLOYD on cap of tube.
- 2.—The words "Prepared only by his Widow" and my signature of AIMEE LLOYD in RED INK across labels, in addition to my late Husband's signature in black ink.

AIMEE LLOYD (WIDOW OF A. S. LLOYD, formerly of 27 GLASSHOUSE STREET,)
3 SPUR STREET, LEICESTER SQUARE, LONDON.

PASTA MACK.



TRADE MARK.

Of all Chemists and Perfumers.

Sole Manufacturer, H. MACK, ULM a/D.

By using this new and excellent preparation a most delicious BATH AND TOILET WATER will be obtained. Pasta Mack SOFTENS the WATER and BEAUTIFIES the COMPLEXION

EWEN'S GUARANTEED PURE LARD

Trade Mark.

ORIGINAL & BEST BASIS FOR OINTMENTS, &c.

Trade Mark.



Adeps Præp.)
Adeps Benz.) EWEN'S



Can be obtained through any

WHOLESALE HOUSE.

Facsimile of Label. Mutton, Beef, Veal, and Deer Suet and Beef Marrow, Clarified Trotter and Neats' Foot Oil. Facsimile of Label.

Every variety of TOILET SOAP from 56/ to 224 per cwt.

EWEN'S Clarified Fat Works Perfumery and Toilet Soap Factory, 5 HATFIELD STREET, LONDON, S.E.

SHIPKOFF & CO. OTTO OF ROSE

MANUFACTURERS & MERCHANTS,
KIZANLIK, BULGARIA.

VIRGIN OTTO ONLY DEALT IN

REPRESENTED IN ENGLAND BY

GEO. P. BAKER, 19 Ivy Lane, Newgate St., London, E.C.
28

JOHN R. HALL'S WOOD VIOLET.



PATRONISED BY

- H.R.H. The Princess of Wales.
- H.R.H. Princess Christian.
- H.I. and R.H. the Crown Princess of Germany.
- H.R.H. the Princess Louise (Marchioness of Lige).
- H.R.H. Princess Henry of Battenberg.
- H.R.H. the Duchess of Teck, &c.

EDWIN R. BIGGLESTON'S HELIOTROPE ESSENCE

The Queen, the Ladies' Newspaper, remark: Edwin R. Biggleston's HELIOTROPE ESSENCE is delicate and durable; can be recommended.

In Bottles. 1/6, 2/6, 5/6, 7/6, 10/6, and

EDWIN R. BIGGLESTON
CANTERBURY

HIGH-CLASS PERFUMERY

"Messrs. J. Atkinson & Co.'s PERFUMES are in aroma and strength particularly fine."
Chemist & Druggist,
Jan. 29, 1887.

J. ATKINSON & CO.

Proprietors of REGISTERED "ZENITH" BRAND PERFUME

Samples and quotations on application, at their only address,
5 FINSBURY SQUARE, LONDON.



FABRIQUE DE MATIÈRES PREMIÈRES DE PARFUMERIE.

PARFUMERIES DE SEILLAN (VAR, FRANCE).

Flower Pomades. Perfumed Oils. Flower Extracts Essential Oils. Distilled Waters, &c., &c.

OF ALL WHOLESALE DRUGGISTS, OR WHOLESALE ONLY OF

R. C. TREATT, Dunster House, Mincing Lane, London.

A. S. LLOYD'S EUXESIS,

For Shaving without Soap, Brush, or Water.

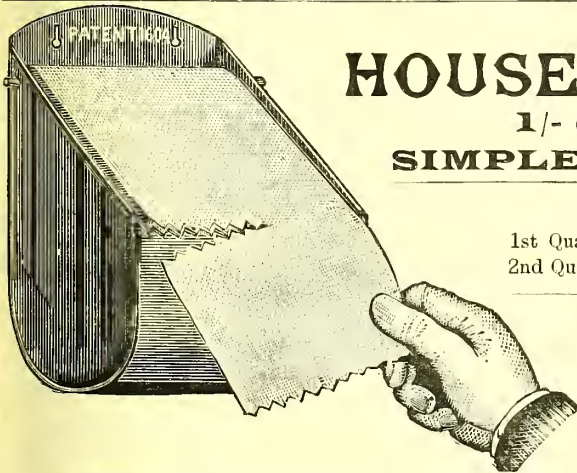
CAUTION.

The only Genuine has a yellow label printed ONLY in Black Ink, and bears the original address of the late inventor, "27 Glasshouse Street, Regent Street," the proprietors having purchased, under an administration suit, the Secret, Trade Mark, Goodwill, and Premises:

SOLE PROPRIETORS

R. HOVENDEN & SONS, LONDON.

HEAD QUARTERS FOR TOILET FIXTURES.



THE NEW HOUSEHOLD FIXTURE,

1/- each, complete with Roll of Paper.

SIMPLE. EASY. EFFICIENT.

REDUCED PRICE FOR REFILLS.

1st Quality 5/6 per dozen, or 63/ per case of 1 gross.
2nd Quality 4/6 per dozen, or 100/ per case of 2 gross.

JOHN S. DOWNING

Commercial Street, BIRMINGHAM;
9 ROSE STREET, LONDON, E.C.; 73 VIRGINIA
STREET, GLASGOW.



OSCAR SUTTON & CO., PRESTON, LANCASHIRE.

REGISTERED TRADE MARK.

O.S. TOOTH BLOCK, "The Best and Safest Dentifrice."

We have arranged with a first-class Die-sinker to supply us with a large quantity of name-plates, at a uniform charge of seven shillings each, irrespective of the number of letters required. You can now have your Name, Business, and Address stamped on each Block, at no extra charge beyond the cost of name-plate, seven shillings, as above.

Orders received through any of the leading Wholesale Houses. Orders direct to us must in all cases be accompanied by a remittance.

One customer, residing in a town of less than 10,000 inhabitants, has just been supplied with the eighth gross, specially stamped.

O.S. Tooth Block, in Patent Metallic Box, retail 1/- each, 7/- per dozen.

IMPORTANT NOTICE!

The Next Issue of THE CHEMIST AND DRUGGIST set apart for the insertion of PRICE LISTS and CIRCULARS, is that of JULY 28, 1888.

FOR TERMS APPLY EARLY TO

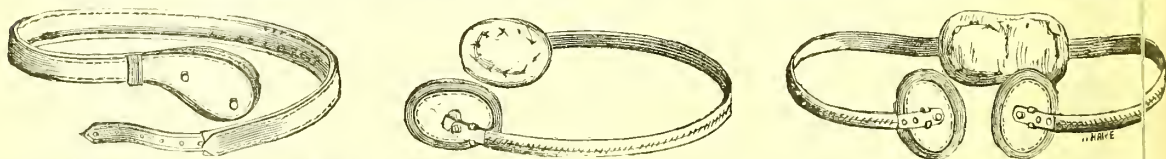
THE PUBLISHER, at the OFFICE, 42 CANNON STREET, E.C.



TRUSSES.



THE BEST FOR SHAPE AND QUALITY. FIRST PRIZE, 1879.



MANUFACTURED THROUGHOUT ON THE PREMISES.

GREAT FACILITIES FOR MANUFACTURE AND QUICK DESPATCH OF SPECIAL TRUSSES.

BAILEY'S TRUSSES FOR SCROTAL HERNIA.

BAILEY'S INDIARUBBER TRUSSES FOR INFANTS.

MANUFACTURERS and DEALERS in all kinds of SURGICAL APPLIANCES, WHOLESALE and for EXPORT
Shippers and the Wholesale Trade Supplied on Best Terms and Lowest Prices.

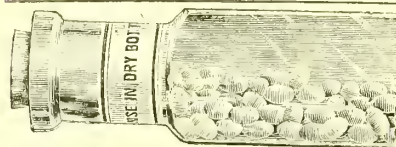
W. H. BAILEY & SON, 38 Oxford St., LONDON

ILLUSTRATED CATALOGUE AND TERMS ON APPLICATION.

APPROXIMATE SIZE OF THE FOLLOWING

OVOID CAPSULED PILLS

Prepared by MCKESSON & ROBBINS.



	DOZ. BOTTLES		In this form the ingredients are not only perfectly preserved, but do not affect the teeth, or offend the palate, and, further, can be conveniently kept out of sight by those who object to be regarded as invalids.	DOZ. BOTTLES	
	containing 25 PILLS.	containing 100 PILLS.		containing 25 PILLS.	containing 100 PILLS.
Aconitine Crystals (Duquesnel)	1-500 gr.	7/ 24/	Elaeterine	1-20 gr.	13/ 47/
" " " " " " " " " "	1-200 gr.	7/ 24/	Ipecac. Powdered	1 gr.	5/ 16/
Aloin " " " " " " " " " "	1-10 gr.	5/ 16/	Iron, Arseniate	1 gr.	5/ 18/
" " " " " " " " " "	1 gr.	6/ 20/	Mercury Bi-Iodide	1-16 gr.	5/ 16/
" " " " " " " " " "	1 gr.	7/ 24/	" Proto-Iodide (absolutely pure precipitated)	1 gr.	5/ 16/
" Compound	1 gr.	11/ 39/6	" Proto-Iodide	1 gr.	5/ 16/
" and Strychnine	1 gr.	7/ 24/	Morphine, Muriate	1 gr.	7/ 24/
" Strychnine and Belladonna	(See Cut)	7/ 24/	" " " " " " " " " "	1 gr.	9/ 32/
Arsenious Acid	1-50 gr.	5/ 16/	Nitro-Glycerin	1-100 gr.	7/ 24/
" " " " " " " " " "	1-20 gr.	5/ 16/	" " " " " " " " " "	1-50 gr.	7/ 24/
Atropine	1-300 gr.	7/ 24/	Picrotoxin	1-80 gr.	7/ 24/
" " " " " " " " " "	1-100 gr.	7/ 24/	Podophyllin	1 gr.	5/ 16/
Calcium Sulphide	1-10 gr.	6/ 20/	" " " " " " " " " "	1 gr.	5/ 16/
" " " " " " " " " "	1 gr.	6/ 20/	Quinine, Bi-Sulphate	1 gr.	5/ 16/
" " " " " " " " " "	1 gr.	6/ 20/	" " " " " " " " " "	1 gr.	5/ 16/
" " " " " " " " " "	1 gr.	6/ 20/	" Sulphate	1 gr.	5/ 16/
Cannabis Indica Extract	1 gr.	7/ 24/	" " " " " " " " " "	1 gr.	6/ 20/
" " " " " " " " " "	1 gr.	9/ 32/	Strychnine	1-50 gr.	5/ 16/
Corrosive Sublimite	1-30 gr.	5/ 16/	" Nitrate (Dipsomania)	1-60 gr.	5/ 16/
" " " " " " " " " "	1-20 gr.	5/ 16/	Zinc Phosphide	1 gr.	7/ 24/
" " " " " " " " " "	1-10 gr.	5/ 16/	" " " " " " " " " "	1 gr.	9/ 32/
Digitalin	1-60 gr.	7/ 24/	" " " " " " " " " "	1 gr.	8/6 30/

Originated, 1870, by MCKESSON & ROBBINS, New York, U.S.A.

London Agency: Messrs. S. MAW, SON & THOMPSON, 7 to 12 Aldersgate Street, E.

Merchants, Shippers, and the Wholesale Houses in the Trade are also supplied by

Messrs. BURROUGHS, WELLCOME & CO., Snow Hill Buildings, London, E.C.; and Messrs. HOCKIN, WILSON & CO., 38 Duke Street, Manchester Square, London, W.

TABLOIDS.

LONDON]

MAY 26TH

[1888.

"Tabloids."

Medically, the demand of the age is for medicines which do not unnecessarily offend the palate, smell offensive, or derange the stomach. There is also required more uniformity, greater accuracy, and perhaps safer methods in the administration of drugs. Repeatedly has it been urged that to punctiliously regard the palate in health, and as studiously disregard it in disease, could have no possible foundation in reason or common sense, and beyond a doubt the leading men of the profession are of one opinion on this subject. If a fastidious patient be annoyed every time she has to take her medicine, it may not be long ere she changes doctors. In the case of children, successful medication must largely depend upon the form in which medicines are given. Compressing a youngling's nose, holding the head between the knees, whipping or otherwise forcing it to take a nauseous mixture are hardly measures conducive to the welfare of a sick child. There is no gaining the fact that agreeable medication only should be adopted with young children, no matter what may be the opinion with regard to adults. No one likes to have the palate offended—especially in sickness—with bad-tasting drugs, any more than one likes bad odours or the prick of a pin. To a delicate child even the prick of a pin may be quite as acceptable as a nauseous malodorous medicine. *Verbum sat sapienti.*

The Tabloids present many and very substantial advantages over all other forms of medicines yet introduced. First of all, they are made with the pure drug only, and are not contaminated with needless and objectionable excipients. They do not, therefore, like pills, change their condition and become insoluble with time; nor do they, on the other hand, crumble like the imitations do, care being taken to compress them with sufficient force to prevent their falling to pieces.

The "Tabloids" are compressed "hard and soft," care being paid to the purpose for which they are to be used. Those designed for dissolving in the mouth, like Chlorate of Potash, Chlorate of Potash and Borax, and Voice Tabloids are made very hard; while those destined for internal administration are less dense, and quickly disintegrate, such as smooth Subnitrate, Manganese Dioxide, Charcoal Tabloids, &c. Others of the more lightly compressed Tabloids dissolve with the greatest readiness: for example, the soluble Quinine Bisulph. dissolve almost as quickly as they touch the water, and it may be observed incidentally that this renders them infinitely cheaper than, and preferable to, the ordinary Quinine, which is so insoluble that every part requires 740 parts of water to dissolve it. The Sodium

Bicarbonate "Tabloids" are as pure and active as this salt can be, a sufficient dose of it not failing to relieve a "Sour Stomach." The Potassium Bicarbonate "Tabloids" are likewise an eligible preparation, pure and reliable—this salt, as is well known, enjoying precedence over Sodium Bicarbonate in those cases where the "acidity of the stomach" is ever recurring and chronic. This is the salt par excellence in the indigestion from fatty acids, to alkalis the urine, and eradicate the causes of "chronic acidity."

There is an old adage that Soda is the salt for the Liver, and Potash for the Kidneys. Certain it is that for whatever purpose required, the Soda and the various Potash Tabloids do their work well.

The salient points of the "Tabloids" are many, but not one of them is more important than the one that they are easy to swallow. The reason of this is obvious. Not being spherical but lenticular, they do not roll about the mouth and stick in the throat like pills. Who cannot recall his own experiences when as a child he tried repeatedly and almost in vain to swallow a pill. Had our forefathers made a pill of any other shape than round, they would have facilitated a thousandfold the taking of medicine by patients. It requires much experience for a tongue to handle a pill, and a peculiar knack to get it down! The most difficult form of drug to swallow is a pill.

The "Tabloids" furnish all the advantages of pills, and none of their disadvantages. They are portable, easily carried in the waistcoat pocket, and can be taken while following the daily avocations. A most noteworthy feature about them is that accidents are not apt to happen, for the dose of each is accurately apportioned.

LIST OF "TABLOIDS."

Ammon. Bromide, 5 and 10 gr.	{ Quinine Sulph., 1 gr.
Ammon. Chloride, 3, 5, and 10 gr.	{ Arsenic, 1/20 gr.
Ammon. Chloride with Borax.	{ Strychnine, 1/30 gr.
Antifebrin, 2 gr.	Rhei Comp., 3 gr.
Antipyrin, 5 gr.	Rhei and Magnesia, 5 gr.
Bismuth Sub-nit., 5 and 10 gr.	Rhei and Soda, 5 gr.
Caffein Citrate, 1 gr.	Rhubarb, 3 gr.
Cascara Sagrada Ext., 2 gr.	Saccharin, 1 gr.
Cathartic Comp. U. S. P.	Salol, 2 gr.
Charcoal, 5 gr.	Soda Bicarbonate, 5 gr.
Chloral Hydrate, 5 gr.	Soda Chlorate, 5 gr.
Chloramine.	Soda Chlorate and Borax, 5 gr.
Cinchonidine Salicylate, 2 gr.	Soda-Mint.
Cocaine with Potash and Borax.	Soda Salicylate, 3 and 5 gr.
Opium and Opium (Dover Powd.), 5 gr.	Soda Sulpho-carb. 5 gr.
Ipecac. Powder, 5 gr.	Sodium Bromide, 5 and 10 gr.
Iron and Quinine Cit., 3 gr.	Sodium Iodide, 5 gr.
Laxative Vegetable.	Strophanthus, 2 minims of Tinct. in each.
Lithia Carbonate, 2 gr.	Tannin.
Manganese Dioxide, 2 gr.	Test Tabloids.
Nitro-Glycerine.	{ Fer. Pyrophos., 2 gr.
Pepsin Pure (Fairchild).	{ Quinine, 1 gr.
Pepsin Saccharated, 5 gr.	{ Strychnine, 1/100 gr.
Pepsin.	Trinitrine (Nitro-glycerine), 1/100 and 1/50.
Potash Bicarb., 5 gr.	Trinitrine and Amyl Nitrite.
Potash Chlorate, 5 gr.	{ Trinitrine, 1/100 gr.
Potash Chlorate with Borax, 5 gr.	{ Nitrite of Amyl, 1 gr.
Potash Nit. (Sal. Prunella), 3 gr.	Trinitrine Comp. { Capsicum, 1/50 gr.
Potash Permanganate, 1 and 2 gr.	{ Menthol, 1/50 gr.
Potassium Bromide, 5 and 10 gr.	Urethane, 5 gr.
Potassium Iodide, 5 gr.	Voice (Potash, Borax, and Cocaine).
Quinine, 1, 2, 3, and 5 gr.	Zinc Sulph., 1 gr.
{ Quinine Sulph., 1 gr.	Zinc Sulpho-carb. 2 gr.
{ Ferri Reduct., 1 gr.	Zymine Tabloids.
{ Arsenic, 1/20 gr.	Zymine Comp. Tabloids.
{ Strychnia, 1/30 gr.	

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Bottles containing 100 Tabloids, 24s. per dozen, subject to our usual discount; Retail at 2s. 6d.



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SACCHARIN.—The New Sweet Product from Coal Tar; 300 times sweeter than sugar, a powerful antiseptic, non-fermenting, and positively harmless to the human system.

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SACCHARIN, says Sir Henry Roscoe, is "the most remarkable of all the marvellous products of the Coal Tar Industry."

SACCHARIN.—The Rev. C. H. Spurgeon writes: "I regard the discovery of Saccharin as a great blessing so far as my own health is concerned; and I am only one of thousands."

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BEWLEY & DRAPER, Limited, DUBLIN.

See "CHEMIST AND DRUGGIST," December 15th, 1874.

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POST-CARD COMPETITIONS, 1888.—No. 4.

It will be recollected that the task set in April was for our competitors to send us predictions of the first, second, and third of the candidates for election on the Pharmaceutical Council in the order which would be assigned to them by the scrutineers. As already announced, we received in all 571 predictions, besides quite a number which came in a day or two too late, and were, therefore, disqualified. Our vote very distinctly foretold the actual result as far as the first candidate went, more than one-fourth of our candidates awarding top place to Mr. Atkins. The second on the official list, Dr. Symes, was placed third by our vote, and our friends curiously failed, as a body, to anticipate the probably unsuccessful candidates—or, in other words, to accurately gauge the estimation of the untried men. Our vote assumed the probable success of Messrs. Wills and Watt, and the failure of Messrs. Martin and Nichol. In both points our guesses were at fault.

Fifty-eight prophets predicted the first and second in the actual contest; but Mr. Gostling's appearance in the third place unsaddled fifty-six of the soothsayers of the 571. Only two competitors gave the names of the first three in their due order. The cards bearing these correct predictions were sent by Mr. Griffith, 35 High Street, Weston-super-Mare, and by Mr. T. A. James, care of Mr. W. Hunt, 16 Denmark Hill, Camberwell Green. The guinea is divided between these gentlemen.

POST-CARD COMPETITIONS, 1888.

No. 5.

POST-CARDS in this competition must be in our hands not later than Thursday of next week (May 31). All received after the dates we fix are ruthlessly rejected. The usual guinea will be awarded to the person who most correctly anticipates the general vote in regard to

1. Most Popular Perfume.
2. " " Toilet Preparation.
3. " " Patent Medicine for internal use.
4. " " " " for external use.
5. " " B.P. Preparation (with doctors).
6. " " " (with the public).
7. " " Domestic Remedy.
8. " " New Remedy.

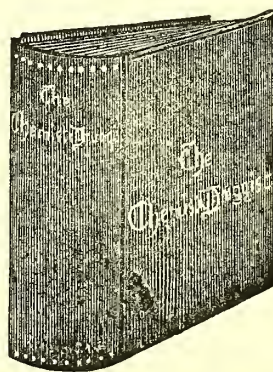
The post-cards need not repeat the words we have printed above; the number will suffice.

We shall count up the votes for the various articles quoted, and shall award the prize to the competitor who most nearly approaches the general decision.

Only subscribers and their *employés* are eligible to compete.

THE ART OF DISPENSING.—It will be remembered that of the numerous treatises which have been published in THE CHEMISTS' AND DRUGGISTS' DIARIES none have been more popular than those dealing with the art of dispensing. The eagerness with which those Diaries were bought satisfied us that there was a substantial demand for a work based on the lines of those treatises, and an unceasing series of applications for a reprint which we have ever since received has added evidence of the want. We have decided to meet the general wish, and we are now getting ready for publication a much extended, and generally a newly written, compendium, which will cover the art of dispensing with a fulness which we did not before attempt. The work will be unique in English literature, and will be one of the most useful companions which the pharmacist can have. Fuller details will be published shortly.

THE reading cases which we offer to subscribers are now used by a very large number of chemists, and are found very convenient. They keep together thirteen numbers in very tidy form, always ready for reference. By having two cases in hand the numbers of a complete volume are always available until the time comes for binding. We sell these cases at the office for 1s., or by parcels post 1s. 3d., or two for 2s. 3d. We cannot forward them to any house for enclosure, nor by any of the carriers, as in the latter case we have to pay for booking.



THE CHEMIST AND DRUGGIST OF AUSTRALASIA, published monthly at our Melbourne office, can be supplied to subscribers outside Australasia at 5s. per annum, payable in advance, and commencing at any date. Chemists interested in the drug trade and the pharmaceutical affairs of the Australasian Colonies will find a full record of all events affecting their occupation in *The Chemist and Druggist of Australasia*. Single copies can be supplied at 6d. each. Application should be made by English or American subscribers to the office at 42 Cannon Street, London.

Provincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor, will much oblige.

BIRMINGHAM.

THE ANNUAL MEETING of the Midland Counties Chemists' Association will be held at the Grand Hotel, Colmore Row, Birmingham, on Thursday, May 31.

BURSLEM.

AN ADVERTISING WAR is proceeding in the columns of the local papers here between the Hanley Drug Company (Limited), who have lately established a branch at Burslem, and whose managing director is Mr. C. F. Fresson, "qualified by 18 years' experience," on the one hand, and Mr. A. R. Fresson, who announces himself as "the only Fresson in the Potteries who is qualified to trade as a chemist and druggist." C. F. Fresson (the Hanley Company manager) cautions the public to buy Fresson's original remedies only from him, and he says:—"This notice is necessary owing to the action of a new importation into the Potteries, who has the good fortune to bear the name of Fresson, and who has had no trouble or expense in making this name popular, and who, by misleading advertisements, wishes the public to believe he is the original Fresson. This self-styled original Fresson was a boy of fifteen when C. F. Fresson (known so well to the public throughout the Potteries and district) commenced business as a wholesale druggist in Hanley, and gave to the public that great boon, genuine drugs and patent medicines at low prices." Mr. A. R. Fresson, in reply, says he does not advertise his patent medicines at cost price in order to sell his drugs and fancy articles at big profits. Every article in the drug trade purchased at his establishment is sold at a reduced price. It is no use the managing director and secretary of the Hanley Drug Company feeling annoyed that Fresson, 30 Queen Street, Burslem, is doing a good trade, because the more he advertises to this effect the more the people will come. If the public will enter into the spirit of this lively dispute and take, or at any rate buy, the physic so liberally provided for them, all will be well—at any rate for the Fressons.

CARLISLE.

CRICKET.—The employés of Mr. Joe Todd, chemist, met the Carlisle Co-operative Club one day last week, and defeated them by 44 to 35 runs. Mr. C. Todd was top scorer with 19.

NORTHAMPTON.

CHILD CHOKED BY A FEEDING-BOTTLE TEAT.—The borough coroner held an inquiry last week touching the death of George Stanton, aged three months, who died on Saturday night, the 12th inst. The mother of the child desired to go up town on Saturday night, and the child at that time being restless in the cradle, she gave it to her husband to hold it during her absence. The husband was seated by the fireside, and, being weary with his day's work, he dropped off to sleep, and was woken by the child choking. There was an impression that if the father had at once attempted to get the teat out of the child's mouth, he might have succeeded. The man, however, was afraid to do anything, and he sought a woman to get the teat out; but this the woman failed to do, and sent the father off for the doctor, but the child died before he arrived. The jury returned a verdict of "Accidental death."

NOTTINGHAM.

NOTTINGHAM AND NOTTS CHEMISTS' ASSOCIATION.—THE MICROSCOPY OF THE STARCHES.—The last evening meeting of the session was held on Friday, May 18, when Mr. Eberlin gave a microscopic exhibition of starches. Mr. Widdowson, honorary secretary, was in the chair. Mr. Eberlin

prefaced his exhibition by explaining that starch is a substance very widely distributed throughout the vegetable kingdom; it occurs in almost all classes of plants except the fungi, from which it is entirely absent. The grains of starch are first formed within the chlorophyll grains they are then infinitesimally minute bodies of a spherical form but as they develop they deviate considerably from this form. The mature grain consists of a number of layers or strata deposited concentrically or eccentrically around a point called the hilum or nucleus. This stratified appearance is now said to be due to different proportions of water in different strata, as when the starch grain is dried by heat it loses this appearance. The method of growth of a starch grain has given rise to much discussion, but it is now generally held to take place by intussusception, i.e. the deposit of fresh particles between those already formed. Its function is to supply nourishment to the plant when it begins to germinate, therefore it is termed a "reserve material." Light is necessary for its formation, and in direct sunlight it appears to be formed at the very moment at which the rays fall upon the green parts of the plant. Varying as it does in appearance, the whole group still possesses some appearances in common, which are so characteristic as to enable us to distinguish it from all other bodies when viewed by special arrangement under the microscope. In size the individual grains vary from the $\frac{1}{2000}$ th of an inch in diameter in busles-mois starch, which is the largest, to the $\frac{1}{10000}$ th in rice starch, which is the smallest. The specimens arranged under the microscope included some grains of potato starch, shown by the aid of polarized light. Attention was directed to the hilum near to one end, and the cross given to it by the polarized light. There was also some arrowroot and yeast starch. The latter, it was pointed out, differed from the preceding, being more nearly round in outline, and having the hilum in the centre. Mr. Eberlin next showed a sample of arrowroot, purposely mixed with potato starch and yeast starch, two likely adulterants, the difference of the grains being at once obvious. He then gave a practical demonstration of drawing and measuring a starch grain. "Here," he said, "is a small glass slip mounted on a slide which has been ruled on it which are the $\frac{1}{1000}$ th of an inch apart. We bring this into focus, then place the microscope in a horizontal position, so that the eyepiece is a distance of about 10 inches from the table; next slip over the eyepiece the camera lucida, and we get an image of these lines thrown down on to this sheet of paper placed on the table. These can be traced easily with a little practice. Now substitute for the protractor the slide on which is mounted the starch grains to be drawn, and we get an image of these grains thrown down on the paper just over the parallel lines, and these can in like manner be traced with a pencil. Now if a certain grain occupied the space between two of the lines, it is obvious that its size must be the $\frac{1}{1000}$ th part of an inch, and on measuring the drawing of these lines we find that the whole ten spaces cover 2 inches, as they here do, they must have been magnified 200 times, since in reality they occupy only $\frac{1}{200}$ th of an inch." Some other starches, such as calumba and nux, were then shown, and in conclusion the lecturer urged his audience to take up this most interesting and useful branch of study and recreation.

OLDHAM.

EXPLOSION OF A WINDOW CARBOY.—Last Saturday evening a somewhat singular explosion took place at the druggist's shop lately occupied by Mr. H. L. Hargraves, and now by Mr. Granville Wood. A large carboy, filled with coloured liquid, and used as a window decoration, being owing, it is supposed, to the combined action of the burning sun and the gas in the shop. The contents were scattered in all directions, and many of the articles exposed for sale in the window were spoiled.

SOUTHAMPTON.

ACCIDENT WITH VITRIOL.—Last week two men were removing a carboy of vitriol from a van into the yard behind the shop of Mr. W. Bates, chemist, Oxford Street, when the carboy fell and broke. The vitriol as a consequence immediately escaped and was wasted, some of it going over the street and hand of one of the men. Mr. Bates immediately applied

oil to the injured parts, thus preventing serious consequences, but the man's boots and socks were spoiled.

SUNDERLAND.

AERATED-WATER BOTTLES.—At the Sunderland Police Court on Wednesday, William Davidson, aerated-water manufacturer, Tyne Dock, was charged under the Trade Marks Act with using a trade-mark belonging to Messrs. Kershaw & Co., Gateshead, with intent to defraud. The prosecution was undertaken by the Northumberland and Durham Mineral Water Bottle and Trade Protection Association (Limited). A bottle of aerated water, bearing Messrs. Kershaw's trade-mark, had been bought at a shop which it was alleged was supplied by the defendant. On behalf of the latter, Mr. Mabane said this was not a prosecution, but a persecution, because Mr. Davidson declined to remain a member of the society. There had been no intention to deceive the public. When he (Mr. Mabane) went into his club or an hotel to have a brandy and soda, he did not care what bottle they got it out of. If the liquor was up to the standard that was all he cared about. He would prove that his client had received last week 65 dozen bottles belonging to other people, and that other makers had received a similar number of his bottles. The Bench decided that there was no fraudulent intent on the part of the defendant, and dismissed the case, but without costs.

WOODHALL SPA.

On Tuesday Mr. E. Stanhope, Secretary of State for War, and the other proprietors of the bromo-iodine spa at Woodhall, Lincolnshire, invited a number of gentlemen to inspect the hotel, new pump room, and baths which have recently been erected at that place. Hitherto the spa at Woodhall has enjoyed only a local reputation, and a short time ago a syndicate—composed of Sir Richard E. Webster, Q.C., M.P., Mr. Edward Stanhope, M.P., Mr. Henry Chaplin, M.P., Mr. T. Cheney Garfit, and the Rev. J. O. Stephens—was formed to develop what now promises to be a popular health resort. The pump-room and bath have been erected from designs by Major Davis, of Bath; and the other buildings are by Mr. R. Adolphus Came, of Mecklenburgh Square, W.C., who is also architect to the syndicate. Plans of a new hospital have been prepared by Mr. Wheeler, of Boston. At the luncheon the chair was taken by Mr. E. Stanhope, M.P., and among those present were Lord Colville of Culross, the Earl of Winchelsea and Nottingham, the Bishop of Nottingham, the Attorney-General (Sir Richard E. Webster), Sir Hickman Bacon, Sir A. Fairbairn, Sir Spencer Wells, Dr. Burney Yeo, Mr. Chaplin, M.P., Mr. Harry Oakley, Dr. Harvey Boulogne, Dr. Braxton Hicks, Mr. T. Cheney Garfit, and about 100 representatives of the medical profession. The coast of the Queen having been honoured, Dr. Burney Yeo said Woodhall Spa was a health resort which he had no doubt would soon claim a European or even a world-wide reputation. This time last year he had the pleasure of attending a similar gathering at Leamington, on which occasion the Speaker of the House of Commons gave a most interesting address on the mineral wells of England, and it was pointed out that if it was desired to promote the prosperity of the English spas there must be certain developments which many of them did not at present possess. The invalid did not merely want water and baths. There must be means of recreation, for the invalid who was well amused was half cured. The Speaker rather reproached English medical men for neglecting the spas of their own country. But he believed they were credited with an authority which they did not possess. They frequently had to take many subjects into consideration, and when recommending any particular spa to a lady it was no uncommon thing for the patient to suddenly address them with the question, "Will not Homburg do as well?" (Laughter.) The young man in the Guards objected to visit Homburg because he was afraid of meeting his tradesman here, and the married man was afraid to go to Bath because his mother-in-law had already been ordered there. (Laughter.) He recommended the syndicate to induce a Royal Highness to pass two seasons at Woodhall Spa, and all these difficulties would be ended. Lord Colville of Culross promised on behalf of the Great Northern Railway Company that every

facility and inducement should be offered to visitors to Woodhall Spa. The health of the chairman concluded the toast list, and the company adjourned to make a tour of inspection of the premises.

IRELAND.

DUBLIN.

METHYLATED SPIRIT-DRINKING.—An inquest was held on Saturday before Dr. N. C. White, city coroner, on the body of a labourer named Patrick Connolly, who resided at No. 4 Cherry Lane. A brother of Connolly's deposed that the deceased was of very intemperate habits, and would sometimes be drunk three times in one day, drinking a fluid commonly known as "finish," which was used in the polishing of furniture. On Thursday evening he drank a great quantity of the "finish," and, as they could not wake him from a state of unconsciousness, he was taken to the hospital, where he died the following day. Medical evidence was adduced that the deceased's death was caused by poisoning, the result of drinking methylated spirits. The compound called "finish" was forty-five per cent. stronger than whisky.

TIPPERARY.

THE DRUG CONTRACT for the supply of medicines to the Board of Guardians, which, as we reported a fortnight since, had become a political question in the Board, has proceeded still further. It will be remembered that the Guardians had before them two tenders for the annual supplies of medicines, one sent in by Dr. O'Ryan, a local apothecary, landlord, and member of the National League; and the other by Messrs. Leslie, chemists, of Dublin, one member of which firm is a Unionist landlord. Messrs. Leslie's tender was accepted, being the lowest. National League influence, however, has been exercised, and at the last meeting of the Board Mr. Ellis, in accordance with notice, proposed a resolution that the medicine contract be rescinded, and that Dr. O'Ryan be declared contractor. The clerk mentioned that Messrs. Leslie had signed their bond, and that already medicines had been received from them under their contract. The Board would lay themselves open to a lawsuit. The contract was, however, rescinded by a majority of eleven to two.

SCOTLAND.

DINGWALL, N.B.

MR. ALEXANDER MACIVER, whose shop was entirely burnt out a few weeks ago, has now had it completely refitted in a high-class style, the work having been undertaken throughout by Evans, Sons & Co., Liverpool.

DUMFRIES.

MR. J. CARRUTHERS ALLAN, son of Mr. William Allan (of Carruthers & Allan, chemists, Dumfries) has been appointed Danish Consul at Lagos, West Africa, where he is superintendent of the African Direct Telegraph Company.

EDINBURGH.

MR. WATT'S DEFEAT.—General regret is expressed in pharmaceutical circles here that Mr. Watt was not elected to the council. His extensive experience in the conduct of public business, municipal and other, would render him a valuable addition to a board not already overburdened with capacity for prompt and practical procedure. He has been, perhaps, rather late in "coming out" in the pharmaceutical arena. His constituents have not all had the opportunity of personal intercourse, and without that a longer time is required in order to be thoroughly "understanded of the voters."

METHYLATED SPIRIT-DRINKING.—At a meeting on Monday of the Edinburgh City Parochial Board Mr. McGibbon said that at a meeting of the Relief Committee, held on Friday, the inspector stated that a large number of applicants for relief came in a very stupid and half mad state, caused by drinking methylated spirits. From various sources they had heard lately that the sale of this spirit was general, and he understood that it was composed of the very coarsest spirit mixed up with at least 10 per cent. of turpentine. The stuff was causing much mischief amongst the poorest class of the

community, and seeing that the number of their paupers might be considerably increased from this cause, he moved the Board make a representation to the Secretary of State for Scotland suggesting that a clause might be inserted in the new Police Bill, or adopt some other means by which the sale of methylated spirits would be regulated and restricted more than it is at present. (Applause.) Mr. Mackenzie, chemist, seconded the motion, and said it was not that the spirit was bad, nor was it that it was mixed with turpentine. It was that while common whisky was understood to be 12 over proof, methylated spirit was 62 over proof, and had an immensely bad effect on the brain. Added to it was a certain percentage of other spirit, which was intended to prevent it from being used for drinking purposes, and in this particular state they found drysalts and the lower order of chemists selling it as drink, their places of business on Sunday mornings swarming like beehives with the wrecks of humanity, whom it ultimately drove to madness. These chemists and drysalts paid a licence of 10s. for selling this spirit, and in this way they were carrying on a legal traffic, but a most dangerous one. The motion was unanimously agreed to, several of the members expressing the opinion that the duty or licence should be made 10*l.* or 15*l.*

GLASGOW.

NEW AMMONIA WORKS.—It is stated that a contract has been placed with Messrs. R. & J. Dempster, engineers, Manchester, to design and erect a complete sulphate of ammonia works in connection with the Govan Iron Works, belonging to Messrs. William Dixon & Co., Limited.

HAMILTON.

DAMAGES FOR CATTLE-POISONING.—In the Sheriff Court Sheriff Birnie has given judgment in an action in which James Hunter, farmer, Capelrigg, East Kilbride, sued Samuel W. Bringan, grocer, East Kilbride, for 25*l.* for damages for the death of a cow and calf, alleged to have been poisoned by saltpetre supplied by defendant's shopman instead of salts. The Sheriff found (1) that on or about June 21 last the pursuer ordered from the defender a pound and four ounces respectively of Epsom salts; (2) that instead thereof he was supplied with a pound and four ounces of saltpetre, and having given them to a cow and a calf respectively they were poisoned and died. He assessed the damage at 17*l.* 13*s.*, besides the expenses of the action.

NIGG.

DEATH FROM CHEMICAL-MANURE FUMES.—On Saturday, May 19, John Ross, farm servant, Arabella, Nigg, died under very peculiar circumstances. On the previous afternoon deceased, with four other servants, was employed mixing and carting to a field a quantity of chemical manures. In the evening all of them became unwell, it is supposed from inhaling the fumes from the manure. Notwithstanding prompt medical attendance, Ross died early on Saturday morning. The other four men are believed to be out of danger.

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

A PERMANENT EXHIBITION OF HYGIENE will soon be inaugurated on the first floor of the Faculty's Ecole Pratique buildings, just completed, on the Rue Monsieur-le-prince. It is intended to gather there models and appliance scattered in the Arts-et-Metiers Conservatory and at the Val-de-Grâce (not open to the public), so as to provide Paris with a practical collection on the plan of the Parkes Museum in London.

POISONING BY MURIATIC ACID.—M. Vaquez, a medical interne at the Tenon hospital, has reported the post-mortem of a man who recently died there three days after swallowing 200 grammes (nearly 7 oz. by weight) of hydrochloric acid. The caustic action seems to have chiefly borne on the breathing organs, the trachea and the bronchi being much injured, while the larynx remained almost unaffected. The death was caused by suppurating broncho-pneumonia. The digestive tube, tongue, pharynx, and œsophagus even, were scarcely touched, but the stomach was deeply injured.

The intestine remained sound, which shows that the stomach retained the liquid. The relative immunity of the digestive organs above the diaphragm is most remarkable.

THE CONGRESS OF SCIENTIFIC SOCIETIES met in large numbers on Tuesday, May 22, at the appointed time, in the halls of the Ministry of Public Instruction, and after a brief introductory address by President Jean Bouilhet, the members separated to the section meeting rooms, where they soon organised for work. The section of sciences had for chairman M. Faye, of the Paris Observatory, with Professor Milne-Edwards, of the College of Pharmacy, on his right, and M. Vaillant on his left. The business of the day consisted only in appointing hours of meeting and fixing days for the various papers announced. The subsection of medical sciences, with 15 papers, is to meet at 9 A.M.; and mathematics and mechanics, with 7, at 10 A.M.; physics and chemistry, 24 papers, and natural sciences, 30, are to meet together at 1.30 P.M. Other communications, not announced formally, are also forthcoming, so that the labours of the section cannot fail to be interesting. A lively discussion about fossil phosphates seems to be looming up in the chemical subsection.

A SET BACK FOR "ANALGESINE."—It will probably be remembered that "analgesine" is the new name proposed to designate antipyrine, and thus avoid conflict with the claiming property in the familiar designation. But it was alleged at a meeting of the Academy of Medicine that to country physicians have been in the habit for a long time of prescribing under the name of "analgesine" a certain mixture of their own, entirely different from antipyrine. The parties interested in the patent rights make all they can out of this complication, while others maintain as stoutly as ever that the copyright being *de jure* null and void, anyone is free to make and sell antipyrine under its best known appellation. The truth in all this appears to be that the threatened confusion of "analgesines" is grossly exaggerated if it exists; and that, on the other hand, while everyone loudly proclaims the antipyrine patent's invalidity, no one cares to join issue with the doughty Dr. Knorr. In the meantime the infringement suit against M. Petit is still on, but no progress has been reported lately.

ALMOST AN EPIDEMIC POISONING.—The town of Sals d'Hyères has been struck with consternation. Near the middle of May nearly the whole population experienced symptoms of poisoning, and eleven persons died. The cause of the accidents was found to have been wine which was traced to the cellars and storehouses of the Count de Villeneuve, a wealthy landowner and vintner of the place. The Count has been arrested, and the internal organs of the victims have been exhumed and sent in sealed jars to the Paris municipal laboratory for analysis. The symptoms of the fatal sickness tend to prove arsenic to have been the poison, but how it found its way into the wine still remains an obscure question. Of course rumours are plenty, and are suggestions. Some speak of arsenic having been used in the vineyards against phylloxera; others hint at criminal carelessness, and again the more learned recall the occasional presence of arsenic in sulphuric acid and in aniline colours, the first being used for making glucose, and both glucose and anilines being employed for adulterating wines. Finally the possibility of some fiendish revenge is also hinted at. The judicial investigation now progressing will probably decide who is to be held responsible.

MORE PRIZES FOR INTERNES.—The Corbeil Civil Court has just rendered a decision directly interesting to hospital internes, and incidentally bearing on a serious question of jurisprudence. One Dr. Fillieux, by a will duly executed some months before his death, bequeathed a life interest in the estate to a servant, the property afterwards to go to the Assistance Publique for the purpose of founding two annual prizes for one hospital interne and one externe student. But shortly after his decease, the servant, a comely young woman, produced another will, purported to have been made on the day before the doctor's death, whereby he gave her all his fortune unconditionally. Both wills were holograph—that is wholly written in the testator's hand—the hardest sort of will to break, according to French jurisprudence. Only, when the first was traced with a firm hand, the second was blurred and the date so indistinct as to be illegible. The date of

will, always a most important point, was vital in this instance, and decided the case. The judge held that, as the law strictly commands all testaments to be dated, the instrument produced was null and void, and it was immaterial which of the two wills had been executed first. Judgment, therefore, was given for the Assistance Publique, and the young men will have the prizes in good time.

A SULPHUROUS SPRING IN PARIS.—Springs of strongly sulphurous water have just been discovered in the Isle St. Denis, at depths varying between 11 and 13 metres (36 to 3 feet). M. Stanislas Meunier, on bringing the fact to the notice of the Academy of Sciences, added that in his opinion the sulphuration of the water was caused by the simultaneous presence in the soil of gypsum fragments and vegetable matters—in less scientific words, plaster-rubbish and street-sweepings. M. Meunier was, no doubt, right in his explanation, but something he did not mention is that more than once before have sulphurous springs been discovered in Paris; they were, however, invariably found to owe their sulphur to all more impure neighbours than plaster and vegetable refuse. Another interesting fact relating to the geology of Paris streets is that last year, when a new sewer was dug near the Porte St. Martin, lumps of sulphur crystals were reported to have been found in a ground which is known to have been filled in less than thirty years before. The same explanation was offered for the formation of the sulphur, namely, the reduction of lime sulphate by organic substances; proper materials having been used by the contractors. Fortunately, the sulphur find was not sufficiently vouchered to be accepted as a scientific fact.

Personalities.

MR. E. C. T. BRIDGES, of 7 Market Place, Willesden, has sold his business to Mr. Robert Kerr, for many years with Messrs. Squire, of Oxford Street. Mr. Parson C. Baker managed the transfer.

MR. S. STEPHENSON, pharmaceutical chemist, has just erected new premises at 98 Kensington, Liverpool, which have been fitted up for him in a high-class manner by Messrs. Evans, Sons & Co., of Hanover Street, Liverpool.

MR. JOHN HUGHES, C.C., of the firm of Idris & Co., has been elected a fellow of the Chemical Society. According to the *St. Stephen's Review* the members of this firm have recently received quite a shower of honours. Mr. Thomas H. Williams, one of the firm, had conferred on him the Red Cross of France in November last, and Mr. W. Adpar Jones north later received the Red Cross of Belgium, both being solicited testimonials. The Maharajah of Tagore (the Sir Indira Lawson of India), having heard of these recognitions, has just decorated the remaining member of the firm (Mr. John Hughes, C.C.) with his special diploma and order.

THE LATE MR. EUGENE RIMMEL.—By his will the late Eugène Rimmel, of the Strand, and of Neuilly, Varennes, and Paris, France, perfumer, who died on February 25, 1882, was well known as a liberal supporter of the French charities in London, desires that his wife, Mdme. Betzy Rimmel, availing herself of the privilege granted to her by her contract of marriage, may continue for her own account, for ten years after his death, his business in London, Paris, and elsewhere, entrusting the special management thereof in London to his son, his head clerk, and his foreman, and in Paris and Neuilly to his manager there, and paying to each of them per month, and 5 per cent of the profits. In the event of the wife's compliance with his wishes in this respect, he bequeaths to her the whole share of his property, movable and immovable, of which the French law gives him power to dispose in her favour, and requests her to pay legacies of £1000 each to the French Chapel, Leicester Place, the French Hospital, Lisle Street, and the French Benevolent Society; £1000 to each of his employes (male or female) who may have been with him upwards of twenty years, of 500l. to each who may have been with him upwards of ten years, and of 100l. to each workman and workwoman of ten years' service; £500 each to his friends Dr. A. Vintras and Mdme. Petit; £200 each to his sisters, Mdme. Corby and Mdme. Serias. The value of his personal estate is declared to be £20331. 18s. 2d.

NEW COMPANIES.

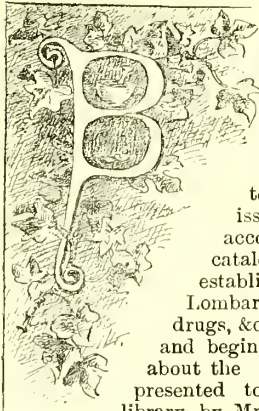
BARCLAY & SONS (LIMITED).—Capital, 100,000l., in 50 shares. Object, to purchase the business, business premises, &c., of Barclay & Sons, wholesale patent-medicine vendors, &c., 95 Farringdon Street, E.C. The first subscribers are G. R. Barclay, patent-medicine vendor, 95 Farringdon Street, London, E.C.; H. Davenport, chemist, 33 Great Russell Street, London, W.C.; C. H. Barstow, surgical instrument maker, 5 Albion Place, Blackfriars, S.E.; G. Barclay, patent-medicine vendor, 95 Farringdon Street, London, W.C.; A. E. Barclay, analyst, 3 Blissington Road, Lee; R. Wilson, warehouseman, 24 Gainsborough Road, Mile End, E.; and G. H. Ball, 73 Strand, London, W.C. The number of directors shall not be less than three nor more than five. The first shall be G. R. Barclay, W. Powell, A. E. Barclay, and John P. Quick. The qualification shall be the holding of not less than 50 shares of 50l. each. The remuneration to Mr. George R. Barclay as managing director shall be the sum of 5000l. per annum, and to the other directors the sum of 1000l. per annum each.

THE REGINABIS COMPANY (LIMITED).—Capital, 20,000l., in 50 shares. Object, to lease, hire, or purchase the lands, works, and springs of mineral and medicinal waters known as the Apollo Spring, situate at Niedermerdig, in Rhenish Prussia, and to carry on the trade of manufacturers and dealers in mineral, medicinal, and table waters. The first subscribers are A. A. Manero, wine merchant, 24 Old Broad Street, E.C.; E. F. Gye, merchant, 9 Great St. Helens, E.C.; N. Abdo, clerk, 21 London Road, Clapton; J. J. Cornill, Cannhall Road, Leytonstone; A. S. Curtins, merchant, 9 Great St. Helens, E.C.; J. S. Curtins, merchant, 9 Great St. Helens, E.C.; E. T. Booth, 49 Arlington Road, Tulse Hill. The number of directors shall not be less than three nor more than seven. Qualification, 10 shares; remuneration, 4000l., to be divided amongst them.

F. C. RUSSELL (LIMITED).—Capital, 25,000l. Object, to purchase the business known as the "Russell" treatment for the cure of obesity, at present carried on under the style of F. C. Russell, of Woburn House, Store Street, Bedford Square, for the sale of a certain preparation under the said treatment, and to carry on the business. The first subscribers are A. Wells, 1 Queen Street, Cheapside; S. B. Hobbs, Reigate, Surrey; H. S. Hubbard, Wigmore House, Redhill, Surrey; A. N. Spencer, 1 Park Hill, Bexley, Kent; S. E. Hubbard, articled clerk, 25 John Street, West Smithfield; C. J. Barry, clerk, 96 Gloucester Road, Camberwell, S.E.; H. W. Robinson, 20 Little Russell Street, Bloomsbury, W.C. The number of directors shall not be less than three nor more than seven. The first shall be S. B. Hobbs, A. Wells, E. A. Swan, and H. S. Hubbard. Qualification, 50 shares in the capital of the company. Remuneration, 1000l. to each director, and an additional 1000l. for the chairman.

PEPPER-GROWING A PROFITABLE OCCUPATION.—The *Straits Times* recently advised planters to turn their attention to the cultivation of pepper, which, it is claimed, is a crop likely to prove a very paying one to the producers, the prices being high and the cultivation a comparatively easy one. The latter is now almost exclusively in the hands of the Chinese, only one European, Mr. Stevenson of Klang, in the Straits Settlements, having thus far ventured upon pepper-growing. One indispensable condition for the success of pepper-growing is good choice of ground, especially as regards the situation of the land. Flats or gently sloping land of sedimentary and plutonic formation have invariably been found most suitable for the purpose, and such lands are obtainable in sufficient quantity to meet any demand likely to arise. In the neighbouring native states, far-reaching and fertile plains are available in any quantity. The consumption of pepper, not only in Europe and America, but also in China, has of late proved so steady and rapidly increasing, that the supply has utterly failed to overtake the demand, especially because Acheen, in former times the chief source of supply, does not now produce any quantities worth mentioning.

TWO OLD PRICE-LISTS.



BEFORE railways and the penny post were heard of drug merchants were alive to the importance of price-lists. In our last volume (January 29 and March 5) we gave examples of the lists of London prices in 1756 and 1822. It is convenient to recall the fact here that in our issue for March, 1885, is given an account of seven volumes comprising catalogues of articles sold at the old-established drug firm in Plough Court, Lombard Street, including inventories of drugs, &c., extending over nearly a century, and beginning, as far as we could ascertain, about the year 1747. These volumes were presented to the Pharmaceutical Society's library by Mr. Thomas Hanbury, and are of

exceeding interest.

For a volume which carries as two decades further back we are indebted to Mr. James Mackenzie, of Edinburgh. This volume is "ex libris Caroli Tough, anno 1724," and appears to have been the commonplace-book of that gentleman, whose habitation at that time was Glasgow; but we find that there is a record in the volume that in 1719 he resided in Kilmarnock. What Mr. Tough's profession may have been we have no information, but that he was a centre for the dissemination of knowledge is apparent from the long list of books lent, dating from 1718 to January, 1720. This commonplace-book, like many other commonplace-books, was commenced, but not continued with any spirit. The first annotation (written in 1715) is a reply to the question, "What are we to think of Death-bed Repentance; and whether, in an ordinary way, we have any good Grounds to expect it will be unto Life." Into the answer to this question Mr. Tough enters with that philosophic acumen which is supposed to be characteristic of his countrymen in theological matters, and he arrives at a business-like conclusion of the solemn argumentation, viz, that "it is unsafe to build up our Hopes of Mercy on a Death-Bed Repentance." From this subject he passes on to medical matters, upon which he has six articles, five of them written in Latin. The first one is entitled "De Tabæ cum Diabete & cum Diarrhœa & Dysenteria." Regarding the latter complaint, he tells us "First the Diarrhœa and Dysentery is to be cured by ye use of proper medicaments. Such as the continued use of a milk Dyet, of the Peruvian bark; Chalybeate Mineral Waters, and ye white Decoction for ordinary drink. The consumption frequently supervenes children breeding teeth, and is easily cured by the use of the White Decoction with pearl, and Juleps and astringent medicines a little opiative, as follows:— γ Hg: Plantag: Tormentil: Germin: querc: aa: ζ ij.; Aq: cinnam: hord: ζ iv.; Aq: Mirabil: ζ j.; Margarit: Coral: ppt: cret: a ij .; Bol: Ver: Sang: drac: a3ss.; Terr: Japon: ij .; Spt: Vitrol: q.s. ad: grat: acidulat: syr." How many young pharmacists nowadays could face that prescription? We need not go further into Mr. Tough's medical lore, but shall proceed to his prices. The prices for 1726 are simply given as "London prices," but for the following year they are stated as those of "Statefield & Baker, in Lumbar [Lombard?] Street. Below Cross Keyes." The location of this firm is worthy of note, for it is probable that Lombard Street was at one time a centre for druggists. The prices in Mr. Tough's lists are for drugs, chemicals, and their preparations, and in the latest list a few druggists' sundries occur. The prices of some of the commoner medicines are remarkably moderate. For example, we have the following:—

	s.	d.
Ærugo aris Gallicæ	lb. iij.	2 4
Argentum vivum	lb. j.	5 0
Arsenic alb.	lb. j.	0 3½
Cera alb.	lb. j.	2 0
Pulv. liquirit.	lb. j.	0 4
Rad. irid. flor.	lb. j.	0 8
Sarsaparilla	lb. j.	4 0
Sem. card.	lb. j.	1 6

The latter two articles are especially moderate, considering

the distant countries from which they are imported. Thirty years later the broker's price for sarsaparilla was 2s. 1d. per lb., and cardamoms were 4s. 7d. Similar lowness of price is observable in some of the gums. Here we have "gummas: foetid: opt.:" quoted at 5s. per lb., and myrrh at 3s. 8d. but benzoin opt. at 6s. and galbanum at 4s. per lb. are not so close to the broker's prices of 1756. "Bals: Tolut:" is quoted at 6s. per lb., and the Peruvian balsam at 1s. 6d. per oz. "Cantharad: lb. j., 4s.," is a quotation 50 per cent. lower than the same article figured at in the list which we published in January. It will be found useful, as well as extremely interesting, to compare these and the following prices with the present prices of the same articles. In all cases the orthography is as we find it in the manuscript list:—

	s.	d.
Flor: sulph:	lb. j.	4 0
Ol: anis: elym:	lb. j.	9 0
Ol: origan:	3 j.	1 6
Ol: petrolei	lb. j.	2 0
Vitrioli	3 j. 2d.,	lb. j. 1 0
Piper: long:	lb. j.	2 8
Piper: alb:	lb. j.	3 4
Sang: dracon: com:	lb. j.	3 6
Sem: sanetonic	lb. j.	8 0
Tart: emetic	lb. j.	6 8
Ichthecocilla	lb. j.	4 6
Subl: Corrosiv:	lb. j.	7 6

Clyster pipes, 1 dozen of boxwood, are quoted at 4d., and for bone, 1s. 6d.; 100 sheets of wafers cost 1s. "Catic: potential: ζ iv.," 2s.; and ungt: laurin: was 1s. 2d. per lb. The latter part of Mr. Tough's list is rendered confusing by the fact that the prices are entered in the cash column in such a way that it is difficult to tell whether the first column is used for pounds or shillings. Thus camphor at 4s. 4d. was a reasonable price in 1727, but immediately below that quotation are "Cantharid" lb. | 1 | 10 | — and "Cort: peruv" lb j | 1 | 14 | —. Taking all the items together, the weight of the evidence seems to show that Mr. Tough used the first column for shillings; but why he should quote such a price as "one shilling and fourteenpence" is unfathomable.

Another list which is before us is dated London, April 1, 1833, and was issued by

JOHN WARRICK

IMPORTER of the CHEMICALS of Messrs. P. Uelexier, Robinet, and Boyreau; and M. T. Levaillant of Paris, and of FINE ESSENTIAL OILS, PERFUMED SPIRITS, &c. Also the sole agent for the SULPHATE DE QUININE, of Mr. M. F. Levaillant, No. 9 THREE KING COURT, LOMBARD STREET.

This list is a two-page quarto sheet, and is wondrously rich in fine chemicals. For example, it contains the following articles at the prices (in parentheses) per ounce:—Brine (£4 10s.), Caffeine (£6), Carthamine (£8), Catharine (8), Cetine (£110s.), Delphin (£10), Emetine (pure, £15; Clex £1 4s.), Morphia (pure £1 8s.); picrotoxine (£10), Quinine (acetate £1)—no price quoted for sulphate; Salicine (s.), Strychnine (xtl. £4). Alcoholic extract of Nux Vomica figures here, as in Morson's list (*C. & D.*, March 5, 1888) as a speciality, and the price is given at 4s. per oz. Brine had few uses those days, otherwise it would not have been a chemical curiosity at 1l. per oz. Those who nowadays appreciate the advantages of the gelatine copying-pad will, half a century ago, have found their feelings go all the other way, for No. 1 gelatine was 10s. a lb., and glycerine 83 per cent. But should not the latter be the price per lb.? Would iodine quoted at the same price, although Morson in 1822 sold it at 7s. per oz. Contrast, however, the great reduction in the prices of the useful alkaloids, morphine and quinine. Morson's price for morphia in 1822 was 18s. per drachm and quinine sulphate was 40s. per oz. Strychnine, also, which was quoted by Morson at 25s. per drachm, is here given at £2 15s. per oz., and £4 for the "crystallised" article. These reductions are indicative of the progress of the alkaloids in therapeutics. Sal. succini, which we find quoted by Statefield & Baker in 1727 at 8s. 6d. per oz., is quoted by Mr. Warrick at 10s. This appears to be the only relic of petroleum from the previous century's list. The occurrence of "Labelia Syphilitica, root," 6s. per oz., suggests that the drug was then a new remedy, for Rafinesque in 1830 ad

spoken well of it as a potent drug, although subsequent investigations in Europe proved that it had no value in the treatment of syphilis, and its use for that purpose was afterwards abandoned. The other items in Mr. Warrick's list which are particularly noteworthy are several of the elements, which are quoted as follows :—

	£	s.		£	s.
Cadmium por oz.	8	0	Manganese, pure re-		
odine "	8	0	duit per oz.	8	0
Molybdene, pure "	15	0	Phosphorus per lb.	1	12
Potassium "	6	0	Selenium per oz.	20	0
Ulicine "	60	0	Sodium "	12	0
Uelare, pure "	15	0	Titane "	10	0
Urane, pure reudit.. .. "	10	0	Zirconne "	4	0
Uerium, pure "	10	0			

A number of these elements were comparatively new to science in the year 1836, and two or three of them had not even been actually obtained in a pure state. Cadmium was discovered in 1817 by Stromeyer, and independently at the same time by three other chemists.

Cerium is one of several elements which are generally accredited to Klaproth. He isolated it in 1804, Berzelius and Hisinger also observing it then; but in the year 1839 Rosander showed that the metal contained the oxides of two new metals, lanthanum and didymium. Iodine was discovered by Courtois in 1812, but it is only during the past thirty or forty years that it has been made on a commercial scale. The isolation of manganese is one of Scheele's achievements, having prepared it in 1774; but it is questionable if the metal was obtained in a pure state until well on in the present century. He also observed molybdenum in 1778, but it was four years later before it was isolated by Hjelm. Phosphorus stands second chronologically in the list of elements whose discovery we have any authentic record of. Brandt discovered it in 1669. Potassium and sodium we owe to Sir Humphrey Davy, the date of their isolation being 1807. The indescript element selenium was discovered by Berzelius in 1772. It is closely related to tellurium as well as to sulphur. Uranium is of special interest to pharmacists as the reputed cause of bismuth breath. It was isolated by Müller von Reichenstein in 1782, and occurs in nature associated with sulphur. The remarkably high price of silicon is probably due to the fact that potassium was used in preparing it. This metal was discovered by Berzelius in 1810. Titanium was discovered by Gregor in 1789, but his metal was not pure, as Wöhler showed about forty years later. Both titanium and zirconium are accredited to Klaproth (1789), but it was not until five years after the date of Mr. Warrick's list that the former was obtained pure, and the zirconium which Klaproth was also shown by Berzelius to be impure.

BENZOLE: A CAUTION.

Your spirits are low, and you're feeling so so, you will find it by no means a bad thing to go to some quiet retreat by the sea for a blow; were the change in the air, and the scene, and the fare all contribute, I dare say you're doubtless aware, by dispelling dull care, to effect a repair of the wear and the tear to which all flesh is heir; were I to be eight out of nine, if the weather is fine, I incline to opine that it quite takes the shine of a bracer of nerves out of Howard's quinine! Ah, the sea is a *sine quâ non*, and, in fine, I think few things come up to a dip in the briny.

I had a friend (you may safely depend on that his name wasn't really Fitz-Rupert Tremend, but no matter, 'twill do!). He determined to spend a fortnight at Folkestone—the Cheriton end. He arrived safe and sound, and most luckily found a respectable boarding-house, justly renowned, with a room on the ground-floor and views all around, and board by the week at the rate of three pound. The arrangements were fine; a good breakfast at nine, and a luncheon with wine, while the hour to dine was fixed at eight-thirty, a capital time! Improving the diet, the terms, and the quiet, I commend thought he couldn't do better than try it!

Now my friend, by the way, is a bachelor gay,
A man about thirty, you'd probably say,
With a beard and moustachios—a gorgeous display!
He's the gentleman quite, and, oh! very polite,
Tall, two inches at least above medium height!
Can you wonder the sight of so gallant a knight,
In the "pension" circle, was hailed with delight?
Then at pic-nics and rides, and the sands at low tides,
At excursions and concerts, and dances besides,
He was always considered the safest of guides,
While to anyone wishin' for boatin' or fishin'
Fitz-Rupert was deemed an immense acquishin'.

So the time flew by, as the time will fly
When the heart is light and the spirits are high,
And the weather is fine and deliciously dry,
With a glorious sun in a glorious sky;
Yet a week has gone past, and the sky is o'ercast,
Dispersing the pleasures too fleeting to last
Which are all disappearing and vanishing fast:
See! Fitz-Rupert, the peerless, is standing aghast!
Then tell us, oh pray! without any delay,
Why it is that he stares in the blankest dismay,
And behaves, too, in such a ridiculous way.
Have patience, my friend, I'm a bit of a wag, an' I
Must defer my reply till I've piled up the agony.

Oh dear! Look ye here! Something's happened, I fear,
For his language is frightful and shocking to hear,
While his antics are queer, and it's perfectly clear
That Fitz-Rupert has gone off his nut pretty near!
Whatever can make him take on so? poor dear!
Pray keep yourself calm. He will come to no harm;
Though his words are unsuited to set to a psalm,
There is really no serious ground for alarm.
I confess I digress; but I want to lay stress
On a plurally singular article. Yes,
Indispensable part of a gentleman's dress,
Which I find is, in verse, very hard to express,
And the fact is I'm anxious before I begin on 'em
To select a polite and appropriate synonym.

Let us now draw a veil o'er that part of his tale
Which had caused poor Fitz-Rupert to rave and bewail,
The unfortunate close of a stroll down the dale.
He had walked p'raps a mile, when he came to a stile,
Where he lit a cigar and sat down for a while
With a satisfied air and a complacent smile,
While his unlucky star sat twinkling afar,
And laughing a sort of celestial Ha! Ha!
When it saw Fitz's seat was besprinkled with tar
(As fences and stiles not unfrequently are!)
And we all know that pitch is a nasty stuff, which is
Very much out of place on a gentleman's br—

To the sensitive mind of a man so refined
It's provoking to find a black patch of the kind,
More especially when to strong language inclined:
But it's all very fine to kick up a shine,
Take advice and "REFLECT," it's a much better sign.
He reflected—his cholera began to decline;
When it came to a stop he made tracks for a shop
Where they sell the contents of the whole Pharmacop-
-Here he asked if they'd got any liquid to sop
Up the tar; if they had, he'd be glad of a drop.
"Oh, yes," said the chemist, "I think I know what'll
Remove it a once—price a shilling a bottle."

Then homewards he stole, with his flask of benzole,
Towards his diggings, immensely consoled the whole
At reaching his lair without meeting a soul;
Just a few paces more, and he entered his door,
Which he bolted; I've stated 'twas on the ground floor,
Then he took off his—(things that we mentioned before)
And he rubbed with a will, and he scrubbed them until,
By dint of hard labour and no little skill,
He'd effaced the "blank" spot from his kerseymere twill,
And his (you know) presented a very clean bill;
Then his toilet complete he surveyed himself in a
Small glass, and by that time was ready for dinner.

There's a cry of "Hullo! Here's a precious rum go!
Some fellah's been turning the gas on, you know,
And it's filling the room up, just isn't it though!"
Such a hullabaloo! What the deuce could they do?
For the housemaid declared "they'd be all of 'em blew
Clean out of the winder, or possibly through
The ceilin', or else up the chimberly flue."
How the ladies did yell! Aye, and scream, too, as well,
And go into hysterics; and, awful to tell,
Some fainted clean off, though they most of 'em fell
Into gentlemen's arms, through that horrible smell;
And the wailing and crying, and sobbing and sighing,
To a man with weak nerves was exceedingly trying.

But Fitz-Rupert, old file—where was he all the while?
Why looking immaculate, spotless of guile,
And striving his hardest to smother a smile.
He'd compared this and that, and of course smelt a rat:
'Twasn't likely he'd tell 'em, though, what he'd been at
With his—(never mind what)—he was not such a flat
As to open the bag and to let out the cat.
Oh, no *that* wouldn't do. So he tried to look blue
And mortally funked, like the rest of the crew;
Though he felt qualms of conscience, it's perfectly true,
When the housemaid suggested, "Best dine in the doring-
Room above, while the gasfitters takes up the flooring."

Then the party repairs up the drawing-room stairs,
While Fitz-Rupert slips into his room unawares
('Twas upon the ground-floor as denoted elsewhere).
Consolation it brings as the changes he sings
On his clothes, and away to perdition he flings
Those odious, odorous—(both the things!)—
Then his troubles take wings, and he hums and he sings,
"Hurrah! hurra-ah! Hang the benzole and tar!"
'Tis a grand transformation scene, better by far
Than when clown in the pantomime shouts, "Here we are!"
'Twas really magnificent, seemed just as if he
Got mixed unobserved with the throng in a jiffey.

That dinner was not by any means what
It would have been had it been served on the spot;
The *entrées* were burnt, and the soup wasn't hot,
The *poissons* were poison, the *rôt* was all rot;
While the din and the roar of the hammer and saw
On the dining-room floor was a horrible bore,
Increased now and then by the slam of a door.
It might aptly be said a wet blanket was spread
O'er the company's head, and as evening sped
They were heartily anxious to get off to bed,
And escape from a row—which my readers will own, I am
Sure, must have been a complete Pandemonium.

Do you think they could go off to sleep? Gracious no!
They were woke by a weird and unearthly Ho! Ho!
Which apparently came from the regions below,
Sounding preciously like an explosion (although
It was Fitz who'd exploded in laughter, you know):
Such a sudden surprise made the lodgers all rise
Up in bed and stare wildly, and rub at their eyes,
And utter discordant and piteous cries!
When the clock had struck four, and they heard nothing more,
They turned over again and prepared for a snore;
It was six when the gasfitters knocked at the door;
So of course in the morning the folks were all yawning,
And Fitz-Rupert thereon gave the landlady warning.

He said nobody knew what he'd had to go through,
For worlds he would not undergo it anew,
He wouldn't indeed! not for double his screw,
And the time had arrived he must bid them adieu,
For his nerves had been quite overcome by the sight
Of the ladies all fainting and looking dead white,
While that blood-curdling night had produced such a fright
He'd been seized with a fit, though 'twas happily slight
(If he meant fit of laughing no doubt he was right),
And he felt (well he might!) safety only in flight;
But that when he got home he would probably write
A letter etcetera, if he could get a
Few moments to spare, just to say he was better.

NEMO.

Practical Notes and Formulae.

CARBOLIC-ACID POWDER.

Fuller's earth	14 oz. 137 grains
Crystallised carbolic acid	1 " 250 "
Crude carbolic acid	1 fl. oz.
Armenian bole	83 grains

Melt the crystallised carbolic acid at as low a temperature as possible and add the crude carbolic acid and Armenian bole; then introduce, in small quantities at a time, the fuller's earth; triturate until thoroughly mixed.

[We take this formula from *New Idea*. Crude carbolic acid is alone used in this country for making disinfecting powder.—ED.]

RAT POISON.

New Idea gives the following formula for a preparation similar to a popular American rat poison:—

Phosphorus	15 grains
Sulphur	15 "
Oil of turpentine	½ fl. drachm
Mustard (volatile)	2 drops
Arsenious acid	100 grains
Lard	263 "
Japan wax	90 "

Divide the lard into two portions (of $\frac{2}{3}$ and $\frac{1}{3}$). With the larger portion melt the Japan wax. Triturate the phosphorus with the volatile oil and sulphur until a perfectly smooth mixture of the phosphorus and sulphur is obtained. Then mix in the arsenic and that portion of the lard which was not melted with the wax. Lastly, add the lard and wax and triturate thoroughly until cold. It is advisable to incorporate with it some pouring matter, such as burnt amber or Armenian bole.

BUTTER COLOURING.

Annatto	1 oz.
Turmeric	3 "
Olive oil	3 "
Spanish saffron	1 drachm
Alcohol	5 drachms

Macerate the annatto and turmeric in the oil for four days, add the saffron in the alcohol for the same time. Filter the first, adding enough oil to complete the measure. Add the tincture of saffron, and evaporate the alcohol at a gentle heat.

FRACTIONAL PERCOLATION.

ACCORDING to the *Western Druggist*, the following is the method recommended by the National Formulary for preparing fluid extracts without evaporation:—Take of the drug, in powder of the prescribed fineness, 16 troy oz. and divide this into three portions, of 8, 5, and 3 oz. respectively.

Moisten the first portion (8 oz.) with the menstruum and percolate in the usual manner. Set aside the first 3 fluid oz. of the percolate, and continue until 24 fluid oz. more of percolate have passed, which should be received in several portions, so that the more concentrated will be separated from the last weak percolate.

Then moisten the second portion of the drug (5 oz.) with the most concentrated of the percolates received during the preceding operation after the first 3 fluid oz. had passed and percolate again in the usual manner, using the several reserved percolates, successively, as menstrua. Set aside the first 5 fluid oz., and continue the percolation until 10 more fluid oz. have passed, which should also be received in several portions.

Finally, moisten the third portion of the drug (3 oz.) with the most concentrated of the last reserved percolates and proceed as directed for the second portion. Collect the first 8 fluid oz. separately, and mix them with the two portions previously set aside so as to make 16 fluid oz. of extract.

A SUBSTITUTE FOR GUM ARABIC,

which has recently appeared in the United States, has been examined by Professor E. B. Stuart (Chicago), and reported by him to be a mixture of very pure dextrin and gum arabic. It is sold in the form of scales, and has been found to be an excellent emulsifying agent.

FAILURES AND BANKRUPTCY REPORTS.

GEORGE DOBSON, High Street, Leicester, Chemist.

THE public examination of this debtor was held last week. His accounts showed liabilities 720*l.* 15*s.* 4*d.*, assets 178*l.* 3*s.* 10*d.* The debtor attributed his failure to the fact that for several years he had had much sickness in the house, and consequently heavy expenses, and to the keen competition in trade. As an instance of the latter he said that one firm in the town advertised hop bitters for retail sale at from 7½ to 10 per cent. less than he got them from the maker, and some patent medicines cost 8*s.* 11*d.* a dozen wholesale and were sold at 9*s.* retail. It was done at a loss for the purpose of advertising. Patent medicines and proprietary articles formed a large proportion of his total sales. Those chemists who did not sell them were in a marked minority. The use of patent medicines was increasing every year, the revenue from that source having doubled in five years. The examination was closed.

W. B. HODGSON, Manor Park, Essex, Physician and Surgeon.

THE public examination of this bankrupt was held on May 18, before Mr. Registrar Brougham, at the London Bankruptcy Court. The debtor, who filed his own petition on April 17 last, with liabilities amounting to 922*l.* 18*s.* 2*d.* against assets valued at 138*l.* 14*s.* 10*d.*, stated that his mother-in-law advanced 300*l.* to him in 1878, charging interest thereon at the rate of 10 per cent., and a sum of 70*l.* in 1881 at 5 per cent., which moneys, however, he would not have been pressed for had not other creditors pressed for payment of their debts. He had practised as a physician and surgeon since 1878, and was even then in a state of insolvency. He agreed to give 325*l.* for the practice at Manor Park, but it had not realised his anticipations, and it was in consequence of the proceedings taken by the vendor that he had been compelled to file his petition. The examination was ordered to be concluded.

Re THOMAS ROPER (trading as Thomas Roper & Co), formerly of 6 Falcon Square, Wholesale Druggist.

THIS was a dividend meeting, held in the London Bankruptcy Court on May 18, before Mr. Registrar Brougham. The debtor, in October, 1857, filed a declaration of insolvency under the Act of 1849, and submitted accounts showing creditors for 13,801*l.* 4*s.* 9*d.*; liabilities, 643*l.* 2*s.* 10*d.*; and creditors holding securities, 8,972*l.* 2*s.* 1*d.* The assets showed good debts to the amount of 5,544*l.* 15*s.* 5*d.*; doubtful debts, 1,002*l.* 9*s.* 4*d.*; property, 2,523*l.* 14*s.* 3*d.*; and property with creditors, 6,900*l.* In the December following he obtained a second-class certificate of conformity. The Official Assignee, in December, 1857, reported that the gross sum received amounted to 3,785*l.* 12*s.* 8*d.*; the costs paid were 1,135*l.* 12*s.* 11*d.*; and the debts proved up to that time were 13,314*l.* 4*s.* A dividend of 3*s.* 8*d.* in the pound was then paid, and subsequently there was a second dividend of 4*s.* 7½*d.*, and a third dividend of 13*s.* 4*d.* It was now reported that there was a balance in hand of 1,146*l.* 13*s.* 11*d.*, certain property having been recovered from Chancery. This was subject to costs. The usual order for distribution was made. Messrs. Laurance, Baker & Waldron were solicitors for the Assignee, Mr. E. Horner, wholesale druggist.

DELPECH & Co, Mincing Lane and Havre, Colonial Merchants.

IN this case the debtor, who traded as G. M. Delpech & Co., attributes his failure to losses on speculative purchases of colonial produce, such as musk, quinine, gum, shellac, mustard, ginger, sponge, sugar, and coffee. He has filed accounts showing gross liabilities 24,392*l.* 6*s.* 3*d.*, of which 1,079*l.* 17*s.* 1*d.* is expected to rank against assets 764*l.* 10*s.* 7*d.* According to the observations of the Official Receiver, the debtor states that he commenced business in 1878 without capital, but subsequently accumulated a considerable surplus, and estimates that three years ago he was worth about

5,000*l.* He attributes his failure to heavy losses by bad debts since January last. The bad debts are stated to represent principally balances due from customers in respect of differences on speculative purchases of produce, and include a sum of 14,113*l.* due from a person who is said to have left the country, the loss by whom is the immediate cause of the debtor's insolvency. The debtor's books do not disclose the results of his trading and his financial position from time to time. According, however, to a balance-sheet prepared for the purposes of the present proceedings, his affairs at December 31, 1887, show an approximate surplus of 9,251*l.* 19*s.* (including as an asset 12,274*l.* then due from the person above-mentioned, and now treated as a total loss). "Creditors unsecured" include a claim of the debtor's wife for 1,596*l.* 4*s.* 1*d.* for money lent; but this claim cannot rank for dividend in competition with the other creditors.

Appended is a list of the principal creditors:—

Unsecured.

	£	s.	d.
Asser, W. W., 29 Mincing Lane	23	15	2
Buchler & Co., Mark Lane	31	5	0
Cresswell, R., & Co., Red Lion Square	11	10	10
Carey & Browne, Mincing Lane	10	17	8
Colman, J. & J., Cannon Street	15	16	0
Drake, J. P., & Co., 11 Mincing Lane	106	6	3
Delpech, Mrs., Greenhithe	1596	4	1
Farley & Co., Philpot Lane	51	9	9
Falconer & Co., Mincing Lane	109	18	8
Grindley & Co., Poplar	146	12	4
Hancock & Co., Mincing Lane	150	2	7
Hasslauer Bros., Mincing Lane	161	12	4
Leech, Welehman & Co., Lime Street	125	0	0
Lesparda & de Thorey, Paris	656	4	0
Lindsay, W. A., & Co., Old Broad Street	20	2	5
Moon, Bower & Co., Mincing Lane	452	19	4
Moore, W. H., Antigua, West Indies	554	10	7
Lambert & Strong, Mincing Lane	18	16	2
Gutmacher, S., Paris	491	8	4
Raynaud, A., Paris	25	7	9
Oftenger, E., Paris	458	1	4
Percy, Browning & Todd	105	11	6
Pohl Frères, Paris	65	15	9
Power Bros. & Co., Crosby Square	300	12	4
Rouse, J. R., & Co., Fenchurch Street	941	8	8
Spillman, G., Mark Lane	15	13	11
Schmidt, Theodor, Hamburg	79	8	2
Sutton & Co., Royal Exchange Buildings	72	2	4
Souratt & Co., 134 Fenchurch Street	19	7	0
Berry, O., trustee for Wood & Rhembrohl	74	6	4
Williams, J. E., Commercial Sale Rooms	19	2	4
Dudok de Wit & Co., Amsterdam	357	17	9
Von Glehn & Co., Idol Lane	1,071	9	4
Benporath, 9 Mincing Lane,	621	10	3
London and St. Katharine Dock Company, Leadenhall Street	74	11	6
Schneider, A., Mincing Lane	227	11	1
Taylor, E. K., Barbadoes	253	14	4
Cleirs & Co., New York	70	0	0
Bryant & Rackstraw, Gravesend	14	0	4
Leurs & Allenby, Regent Street	16	9	6
Coombes & Co., Gravesend	15	10	0
Gooding, Geo., Greenhithe	19	5	3

Fully Secured.

Coulon, Berthond & Co., 41 Threadneedle Street	120	0	0
Ruffer & Sons, Lombard Street	7,663	18	10

Partly Secured.

Delpech, J., Paris	809	18	7
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A YOUNG man recently asked a druggist for a dose of castor oil for his wife who had just been *confound*.

A LITTLE LATE, AND SLIGHTLY OUT.—An Austrian paper, quoting from the *Apoth. Zeit.* in April, says:—"The English Pharmaceutical Society, spurred to action by the proceedings of the German Apotheke Verein, has elected a commission from its members to give more detailed descriptions and exact information as to the manufacture of those drugs, galenicals, and chemicals which have not been included in the last English Pharmacopœia, but which are frequently employed. This commission will publish the result of its labours under the title 'Unofficial Formulary.'"

Gazette.

PARTNERSHIPS DISSOLVED.

- Nell & Bird**, Penarth, Cardiff, surgeons and apothecaries.
Percy & Anstey, Truro, chemists and druggists, and wine and spirit merchants.
Smith, H., & Cooke, L., Aspall and elsewhere, surgeons.

THE BANKRUPTCY ACT, 1883.

RECEIVING ORDERS.

- Fraser, James Pimm, & Cory, John**, Mincing Lane, City, colonial brokers.
Higgins, John, Pewsey, Wiltshire, chemist and druggist.
Shellard, Nathan John, Monmouth (trading with G. Lindsey as the Monmouth Colour Company), paint and colour manufacturer.

FIRST MEETINGS AND PUBLIC EXAMINATIONS.

- Delpech, George Marius** (trading as G. M. Delpech & Co.), Mincing Lane, City, Havre, and Greenhithe, Kent, colonial merchant and broker—May 29, Bankruptcy Buildings, Portugal Street, Lincoln's Inn Fields; June 13, 34 Lincoln's Inn Fields.
Higgins, John, Pewsey, Wiltshire, chemist and druggist—May 30 Official Receiver's offices, Swindon; June 13, Corn Exchange, Swindon.
Preston, Henry Horbury, Pendleton, late of Salford, surgeon—May 31, Official Receiver's office, Manchester; June 4, Court House, Salford.
Tinsley, Richard William, Rillington, Yorkshire, late of Whithy, veterinary surgeon—May 29, Official Receiver's office, Scarborough; June 5, Court House, Scarborough.

ADJUDICATIONS.

- Dixon, Henry Benjamin**, Hanley, wholesale and retail chemist.
Hammond, Benjamin, St. Leonard's-on-Sea, dental surgeon.
Higgins, John, Pewsey, Wiltshire, chemist and druggist.
Kroll, Ludwig (trading as L. Kroll & Co. and the British Hygienic Company), Blundell Street, Caledonian Road, late of Mark Lane, City, chemical manufacturer.
Shellard, Nathan John, Monmouth (trading with G. Lindsey, as the Monmouth Colour Company), paint and colour manufacturer.

NOTICES OF DIVIDENDS.

- Aston, William Clarke**, Church Bank, Tattenhall, Cheshire, druggist, grocer, and general dealer—first and final div. of 4s. 7½d., May 29, Bankruptcy offices, Chester.
Glanville, Francis Ferratus, Clareville Grove, late of Queen's Gate, South Kensington, surgeon—first div. of 2s. 9d., any day except Saturday, Chief Official Receiver's offices, 33 Carey Street, Lincoln's Inn.

APPLICATION FOR DEBTOR'S DISCHARGE.

- Barnes, William Jacob**, Rainham, Essex, chemical manufacturer—July 9, Shire Hall, Chelmsford.

ORDERS MADE ON APPLICATIONS FOR DISCHARGE.

- Hannan, Francis John**, Woodstock, Oxfordshire, late of Workson, and Downton, Wiltshire, doctor of medicine—discharge granted as from July 26, 1883.
Whitham, Joseph (trading as Joseph Whitham & Co. and as the Whitecroft Printing Company), Miles Platting, Pendleton, and Baxenden, Lancashire, also trading with T. Brayshaw, as Whitham & Brayshaw, at Manchester, and residing at Nelson, Lancashire, chemical manufacturer, dyer, printer, and galvaniser—unconditional discharge granted.

ADJUDICATION ANNULLED.

- Clapham, Reginald**, Sunderland, formerly innkeeper, now aerated water manufacturer—grounds of annulment, all creditors paid in full.

SCOTCH SEQUESTRATION.

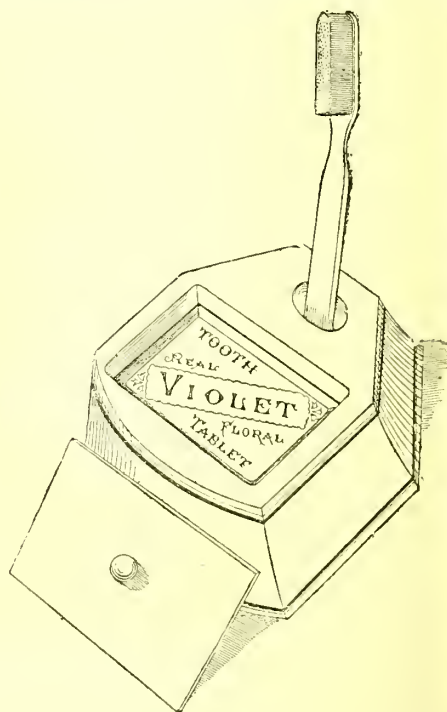
- Warren, Thomas**, Glasgow, bottle manufacturer—May 25, at 12 Faculty Hall, Glasgow.

Notes of Nobels.

WARRICK'S FLORAL TOOTH TABLETS.

MESSRS. WARRICK BROTHERS are introducing tooth tablets made in various tints and odorous with the bouquet of various flowers. These are apparently compressed powders; they contain neither soap nor sugar in any form. Each tablet is fitted into a metallic box with a glass top and a box containing a dozen of these (selling at sixpence each) is a pretty counter ornament.

To encourage the use of these tablets Messrs. Warrick are also putting before the trade a toilet appliance, which they



call the "Dentoilette," which is made of white china gilded with receptacles to hold one or two tooth brushes and the tablet, or, if preferred, tooth powder or tooth paste. The sketch above shows one of the dentoilettes fully equipped.

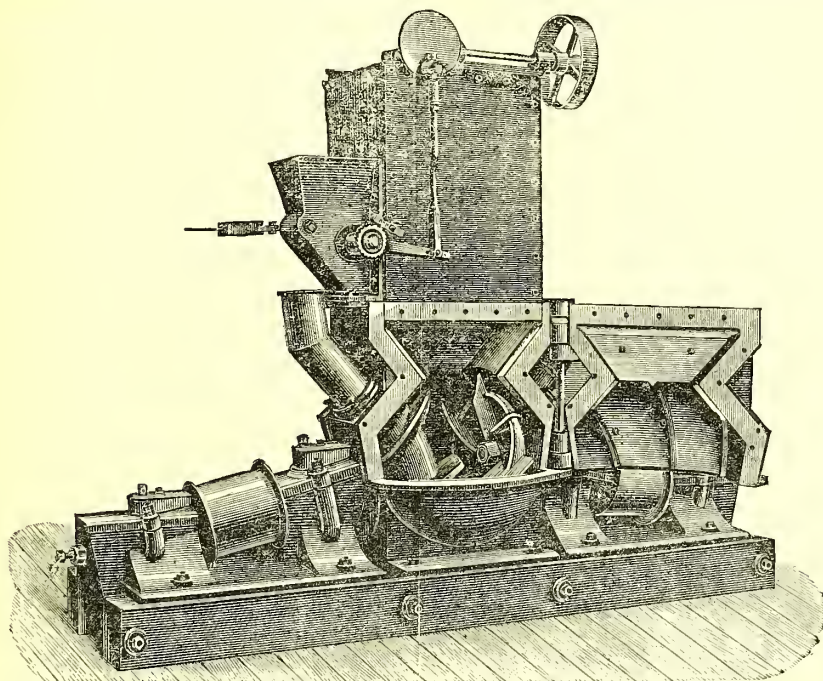
THE "CYCLONE" PULVERISER.

AT the invitation of Messrs. Couper, McCarnie & Co. of 1 Fenchurch Avenue, E.C., we inspected the other day a new disintegrating and pulverising machine in action at the Street Mills, Bishopsgate. The machine is of American origin, and has been named the "Cyclone," in remembrance, it is said, of the fact that an Illinois farmer conceived the idea of its principle through witnessing the devastating action of a cyclone in his native State, thus illustrating the truth of the old saying that it is an ill wind that blows nobody good. The farmer, having got hold of his notion, proceeded to talk it out, but could not get it to work otherwise than on paper, the honour of realising it in a practicable shape remaining with the present patentee of the machine, a gentleman now in this country with a view to effect the sale of his foreign patents.

The machine performs its functions in an extremely simple manner. It consists of two cast-iron fan blowers, perhaps 1½ feet long, and somewhat resembling the screw-propeller of a steamboat. These two fans are placed opposite each

another in a cast-iron box, their lower parts being about 2 inches, and their upper parts 9 inches apart, like two halves of an iron bowl disconnected. By means of iron shafts the fans are connected with the driving-gear of a steam-engine, one of 12-horse power (English) working the machine inspected by us, which is one of the largest size. One fan is set in motion from left to right, and its fellow from right to left, at the rate of about 2,000 revolutions per minute, and thus two currents of air, or cyclones, are generated, each revolving round its own axis in an opposite direction, and meeting in the centre with such force as to reduce even the hardest materials to an impalpable powder. The breaking-up process takes place as soon as the crude material enters

handful of material remains between the fans, the whole almost being drawn into the collecting-bin at the rear, and as no material ever comes in immediate contact with either of the fans, it is claimed that the wear and tear of the machine is practically nil. It should be said that the machine was worked with closed doors, so that the actual action of the fans upon the material was invisible, and that the patentee declined to accede to our request to show us the working of the machine with open doors, under the plea of possible danger; but apart from this fact there is a decided air of genuineness about the invention, though, of course, a casual and necessarily superficial view of its working would not reveal any drawbacks possibly existing. The patentees



the point where the two cyclones meet, and the broken-up particles are further reduced to powder by mutual attrition, the entire process occupying an almost incredibly short time. When the material has been powdered the dust is immediately cast out into a collecting-chamber or dust-bin at the rear of the machine, passing on its way through a net of finer or coarser meshes according to the degree of fineness to which it is desired to reduce the material. The machine is fed from the floor above, the material passing through a hopper and falling thence into the powdering-chamber. Air is admitted through tubes placed above and below each fan, the suction being, of course, very considerable, but capable of regulation and control. When the grinding operation is finished, scarcely a

are about to form a company to exploit the patents for Europe, India, and the colonies, and they also propose to erect a factory in England. They look to chemical works, wholesale druggists, spice grinders, and drysalter for a considerable share of their orders, these branches furnishing, it is said, their best customers in the United States. The material ground in our presence was phosphate rock, but we were shown samples of a large variety of articles, such as marble, plumbago, myrabolans, sumach, various drugs, &c., pulverised by the machine, and the patentee added, with a wink, that "down East" in his own country the "Cyclone" was used to grind up hens' feathers so as to resemble the finest eiderdown—presumably for sale among the verdant population of the Western parts of the same country.

PERMANGANATE OF POTASH IN COBRA-POISONING.—As is well known, Mr. Vincent Richards advocates the employment of permanganate of potash in this form of snake-bite. Only recently an opportunity occurred to him to give it a trial in the case of himself. A Calcutta paper says that he had a narrow escape the other day whilst experimenting with a cobra at the dispensary of the Eastern Bengal State Railway. He had taken out one of the cobras from its case, when, while he held it in his right hand, the reptile bit him severely on the index finger of the left hand. With remark-

able presence of mind, it is stated, Mr. Richards, having despatched the snake by violently dashing it to the floor, excised the bite, laying the finger open to the bone. He then applied some permanganate of potash, and, having tightly ligatured the finger and the left arm, instantly drove down to the residence of Dr. McLeod. Mr. Richards was better shortly after 3 P.M., and was kept under observation till six o'clock, when he was pronounced to be out of danger and allowed to go home. But for the prompt measures taken, it is expected that Mr. Richards would have fallen a victim to the cobra.

PHARMACY ACT (IRELAND), 1875, AMENDMENT BILL.

The following is the text of the Bill which has been introduced into the House of Lords by the Earl of Milltown:—

MEMORANDUM.

This is a Bill to amend the Pharmacy Act (Ireland), 1875. That Act was passed for the purpose, amongst others, of preventing the sale of poisons by unqualified persons, which was carried on in Ireland to the great danger of the public. It accordingly enacted stringent provisions against the sale of poisons by persons not registered under the Act, but having regard to vested interests, it saved by section 31 the rights of chemists or druggists who were practising as such in Ireland on their own account at the time of the passing of the Act (11th August 1875). Unfortunately the Act contained no provision for the registration of such chemists and druggists, and the result has been that many unqualified persons have since the passing of the Act commenced the sale of poisons, and it is almost impossible to obtain a conviction against them, owing to the difficulty of proving that they have commenced this business since the passing of the Act. The Bill provides machinery for the registration of all persons who were practising as chemists and druggists in Ireland prior to August 11th 1875, the date of the passing of the Act, retaining their rights in full, and further enables any person who has commenced business as a chemist and druggist since that date to get himself registered and thereby entitled to continue the sale of poisons on passing a very simple examination showing an elementary knowledge of chemistry and drugs, without which the sale of poisons cannot safely be carried on.

The Bill also contains further provisions for preventing the evasion of the original Act by fixing the proprietorship of all establishments in which the sale of poisons or dispensing of medical prescriptions is carried on, and also for securing that such establishments shall be personally managed by duly qualified persons.

Whereas it is expedient for the safety of the public that all chemists or druggists keeping open shop for the sale of poisons should be registered, and that the Pharmacy Act (Ireland), 1875, should be amended:

Be it therefore enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

1. This Act may be cited as the Pharmacy Act (Ireland), 1875, Amendment Act, 1888.

2. This Act shall apply to Ireland only.

3. In this Act—

“The principal Act” means the Pharmacy Act (Ireland), 1875.

“The society” means the Pharmaceutical Society of Ireland.

“The council” means the council of the society.

“The registrar” means the registrar of the society.

“The treasurer” means the treasurer of the society.

“Poisons” means all articles deemed to be poisons within the meaning of the Act thirty-three and thirty-four Victoria, chapter twenty-six, intituled “An Act to regulate the sale of poisons in Ireland.”

4. The registrar shall, in the manner by this Act provided, from time to time make out and maintain a complete list, to be called “the Register of Druggists in Ireland,” of all persons by this Act authorised to be registered as druggists; and the provisions of the principal Act with respect to the registers thereby authorised shall mutatis mutandis extend and apply to such register, except so far as such provisions are altered by or are inconsistent with the provisions of this Act. All persons so registered shall be entitled to keep open shop for the sale or retailing of poisons.

5. Every chemist or druggist who was practising as such in Ireland on his own account before the passing of the principal Act shall be entitled to be registered as a druggist under

this Act on complying to the satisfaction of the council with the following provisions (that is to say):—

(1) He shall, on or before the first day of December one thousand eight hundred and eighty-eight, make application in writing to the council to be registered under the provisions of this Act.

(2) Such application shall be accompanied by a statutory declaration of the applicant that he was practising as a chemist or druggist on his own account in Ireland prior to the eleventh day of August one thousand eight hundred and seventy-five, and stating the name of the place where he carried on such practice, and also by statutory declarations from two legally qualified medical practitioners, registered as such, that the applicant has to their knowledge carried on such practice on his own account at that place prior to the date aforesaid: Provided that it shall be lawful for the council to require from any applicant before entering his name in the register such further or additional evidence as they think fit of the truth of the statements contained in the statutory declaration so made by him, or, if they think fit to dispense with either or both of the statutory declarations from medical practitioners, and to take in lieu thereof such other evidence as they shall think sufficient.

(3) He shall pay to the treasurer of the society a fee of two guineas.

6. Every chemist and druggist who was practising as such on his own account in Ireland and styling himself as such between the eleventh day of August one thousand eight hundred and seventy-five and the first day of January one thousand eight hundred and eighty-eight, or some part of that time, and every person who, prior to the eleventh day of August one thousand eight hundred and seventy-five, as an assistant or apprentice to any chemist and druggist, shall be entitled to be registered as a druggist under this Act on complying to the satisfaction of the council with the following provisions:—

(1) He shall, on or before the first day of December one thousand eight hundred and eighty-eight, make application in writing to the council to be registered under the provisions of this Act.

(2) Such application shall be accompanied by a statutory declaration of the applicant that he was practising as a chemist or druggist on his own account in Ireland, and styling himself as such between the dates aforesaid, or that he was an apprentice or assistant to a chemist and druggist prior to the eleventh day of August one thousand eight hundred and seventy-five, as the case may be, and the name of the place where he carried on such practice, or was such apprentice or assistant, and also by statutory declarations from two legally qualified medical practitioners, registered as such, that the applicant has, to their knowledge, carried on such practice at that place on his own account between the dates aforesaid, or has been an apprentice or assistant to a chemist or druggist at that place prior to the eleventh day of August one thousand eight hundred and seventy-five, as the case may be: Provided that it shall be lawful for the council to require from any applicant before entering his name in the register such further or additional evidence as they think fit, of the truth of the statements contained in the statutory declaration so made by him, or, if they think fit, to dispense with either or both of the statutory declarations from medical practitioners, and to take in lieu thereof such other evidence as they shall think sufficient.

(3) He shall be examined with respect to his knowledge of the English language, arithmetic, elementary chemistry, and the appearance of and usual tests for the various drugs, poisons, or poisonous substances in general use, and shall obtain from the examiners appointed by the council to hold such examination a certificate of having satisfactorily passed the same.

(4) He shall pay to the treasurer of the society, on presenting himself for such examination, a fee of two guineas, and a further fee of half a guinea on being registered.

7. It shall be lawful for the council, if they think fit to receive the application, in the two preceding sections mentioned, from any applicant on any day after the first day of December one thousand eight hundred and eighty-eight, and not later than first July one thousand eight hundred and eighty-nine, and to cause the applicant to be registered on his complying with the conditions in those sections mentioned applicable to his case, and on payment of such

additional fee, not exceeding one guinea, as the council shall determine.

8. The provisions of the principal Act with respect to the examinations therein mentioned shall extend and apply to the examinations by this Act authorised, except so far as such provisions are altered by or are inconsistent with the provisions of this Act.

9. Every registered druggist shall, on or before the first day of December in every year, commencing with the year one thousand eight hundred and eighty-nine, pay to the treasurer a fee of ten shillings and sixpence, and unless such fee is paid on or before the date aforesaid, it shall be lawful to erase the name of such person from the register: Provided that the same may be restored by direction of the council, if they think fit to make an order to that effect, on payment of the said fee and such additional sum, not exceeding one guinea, as the council by such order shall direct.

10. Every pharmaceutical chemist registered as such under the provisions of the principal Act after the passing of this Act who is in business on his own account, and is not a member of the society, shall on or before the first day of December in every year pay to the treasurer a fee of ten shillings and sixpence, and unless such fee is paid on or before the date aforesaid it shall be lawful to erase the name of such person from the register: Provided that the same may be restored by direction of the council, if they think fit to make an order to that effect, on payment of the said fee and such additional sum, not exceeding one guinea, as the council by such order shall direct.

11. From and after the first day of January one thousand eight hundred and eighty-nine it shall be unlawful for any person to assume or use the title of registered druggist in any part of Ireland unless such person shall be registered as a druggist under this Act; and notwithstanding the provisions of section thirty-one of the principal Act no person shall be entitled to sell or keep open shop for the sale or retailing of poisons by reason that he was a chemist or druggist practising as such in Ireland on his own account at the time of the passing of the principal Act, unless he shall be registered as a druggist under this Act; and any person acting in contravention of this enactment shall for every such offence be liable to pay a penalty of five pounds.

12. It shall be unlawful for any registered druggist to keep open shop for the retailing, dispensing, or compounding of medical prescriptions, or to allow any part of his shop or premises to be used for that purpose; and any person acting in contravention of this enactment shall for every such offence be liable to pay a penalty of five pounds.

13. In the month of January in each year the registrar shall send printed copies of the register of pharmaceutical chemists and of the register of druggists to the inspector of weights and measures in each constabulary district in Ireland, and it shall be the duty of such inspector to report to the council any offences against the provisions of the principal Act or this Act, or the Act thirty-three and thirty-four Victoria, chapter twenty-six, intitled "An Act to regulate the sale of poisons in Ireland," committed within his district, and one third of every sum of money recovered as a penalty against any person so offending shall be paid to any such inspector who shall be the means of bringing such person to justice.

14. Every person or persons lawfully keeping open shop for selling and retailing poisons, or dispensing or compounding medical prescriptions, shall personally manage and conduct such shop and the retailing, dispensing, and compounding of poisons and medical prescriptions therein, or shall employ for the purposes aforesaid as an assistant or manager in such shop some person qualified according to law to keep open shop for the purposes aforesaid; and any person or persons acting in contravention of this enactment shall for every such offence be liable to pay a penalty of five pounds.

15. It shall be lawful for the registrar at any time to write a letter addressed to the proprietor or proprietors of any premises where open shop is kept for the selling, retailing, dispensing, or compounding of poisons or medical prescriptions (such letter to be delivered on the premises or to be forwarded by post as a registered letter according to the post office regulations for the time being in force), requiring such proprietor or proprietors within seven days from the delivery of such letter to furnish in writing to the registrar a statement of the name and address of the *bonâ fide* proprietor or

proprietors of such shop, and if such proprietor or proprietors do not personally manage and conduct such shop, the name of the duly qualified manager or assistant managing or conducting the same and the description of his qualification, and in case such proprietor or proprietors neglect to furnish such information to the registrar within the time aforesaid, he or they, and each of them, shall be liable to pay a penalty of five pounds for every day during which such default shall continue; and so long as such default shall continue it shall be unlawful for any person to sell or retail, dispense or compound, poisons or medical prescriptions on such premises; and every person or persons acting in contravention of this enactment shall for every such offence be liable to pay a penalty of five pounds, unless he or they shall prove to the satisfaction of the court or justices having jurisdiction in the case that he or they did not know of such default.

16. Section eleven of the principal Act shall be read and have effect as if the words "the second monthly meeting" were substituted for the words "ten days" in that section.

17. All sums payable to the treasurer under this Act shall be applied by him under the direction of the council to the purposes of the principal Act and this Act.

18. All penalties recoverable under this Act shall be recoverable and applied in the same manner as penalties recoverable under the principal Act.

19. This Act and the principal Act shall be read together and construed as one Act.

Veterinary Treatment.

FLUKE OR WORMS.

MR. WILLIAM GIBSON, a large stock-keeper of New South Wales, writes to the *Sydney Mail* regarding the use of arsenic for the cure of fluke or worms in sheep. He strongly disapproves of the remedy, and says that if the sheep get salt and sulphate of iron regularly the diseases are prevented. The way in which he uses his preventive is as follows:—Take 10 lbs. Liverpool salt, 1 lb. powdered sulphate of iron, mix these thoroughly together, damping the salt well with water, turning it every day for three days at least, till it acquires a greenish rusty tinge. If given to the sheep without being properly mixed it scours them. Give this to the sheep every month or six weeks of the above strength at first, then reduce the strength of the iron by adding to the mixture more salt, so as to make it, instead of 1 in 10, 1 in 16 parts. Give two full-sized buckets to every thousand. Four times a year, Mr. Gibson adds a quart of turpentine to the two buckets, and he states that it requires care and patience to get the whole of the sheep to take the mixture from the troughs, but after a time they get to like it and eat it more greedily than the plain salt. Sheep which are affected with worms should get 1 to 2 drachms of turpentine to 1 oz. of oil, and two or three doses weekly of the salt and sulphate with the turpentine. Another remedy for expelling the worms is 3 lbs. soap (common yellow), $\frac{1}{2}$ lb. tobacco, dissolved in 5 gallons water; boil and mix well. Dose: A small olive oil bottle to each sheep. On many stock farms in the colony this mixture has been found to be exceedingly effectual.

DR. GUTTERMANN, a Göttingen chemist, has prepared pure tetrachloride of nitrogen, and at the expense of shattered nerves and disturbed eyesight has ascertained that the pure oily liquid is so sensitive to the actinic rays of sunlight as to be violently dissociated thereby. Yet the chloride may be heated to 90° C. without exploding, but another 5 degrees of temperature suffice to finish the experiment, the apparatus, and the chloride. The secret of Dr. Guttermann's success is that he worked in dull wintry days.

"You must push matters a little, James," said the druggist to the new boy. "By calling a customer's attention to this article and that article, you can often effect sales." Yes, sir," responded the new boy, and then he hastened to wait upon an elderly female who wanted a stamp. "Anythin' else, mum?" inquired the ambitious boy, politely. "Hair-dye, cosmetic, face powder, rheumatic drops, belladonna, mole destroyer——" The elderly female licked the stamp viciously and left the door open as she went out.

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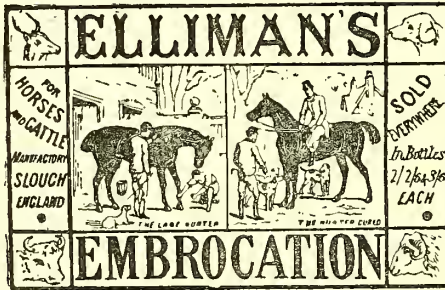
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EDITORIAL NOTES.

ENFORCING THE PHARMACY ACT.

THE motion advocated by Mr. Broad at the meeting of the
Pharmaceutical Society last week, to the effect that the
Society should appoint an officer to obtain information and
report to the Registrar all cases of infringement of the Act
that he may discover, did not receive at that meeting
anything like its fair share of support. It is likely enough that
the exact method suggested of enforcing respect for the
Pharmacy Act would not be the best means that could be
employed; nor would it be desirable that the members at
annual meeting assembled, after the fragmentary discussion
which alone is possible on such occasions, should impose on
the Council a new policy, which more careful consideration
might show to be undesirable. But the way in which
Mr. Broad's motion was met revealed a difference of principle
regard to the Pharmacy Act, as well as a mere difference
of views entertained as to the best means of carrying it out.
The President, for example, speaking no doubt for the
majority of the Council, argued against the motion, first on
the ground that the Act gave the Society no power to put an
informer on the road. Of course it did not; neither did it
give the Society power to employ a solicitor. But it did not
by any means make the employment of either officer illegal.
Then the President, following on this point Mr. Ekin's lead,
told the members what a delicate duty this of prosecution
is; County Court judges sometimes, and juries more often,
still, are disposed to sympathise rather with the person pro-
secuted than with the Society prosecuting, and it was very
important that the Council should not be too active in pre-

ing its rights. This old argument has done duty a great many times, but it is an utterly baseless one. We have a right to assume that when Queen, Lords, and Commons resolved to pass the Pharmacy Act they meant it to be obeyed; they did not express a mere pious opinion and leave that on the statute book subject to the approval of County Court judges. If one or two of the latter have chosen to indicate their personal opinions, this is not a circumstance which should deter a public body from carrying out a duty entrusted to them; and it is likely too that such remarks would soon cease if it appeared that the prosecutors were in real earnest, and believed in the justice of the proceedings they were taking. To look on smiling while fifty people infringe the Act, and then suddenly to jump on some poor little huckster, which is the present idea of carrying out the provisions of the Act "with discretion," is a process which to our thinking is capable of some improvement.

There is no reasonable chance of a new policy being inaugurated by the new Council; moreover the surplus funds once available for a serious legal contest are practically gone, so that, given even the problematical "change of heart," there is getting less and less probability of any serious effort being made by the Council to put down the biggest and most dangerous foe to pharmacy. If there were the smallest hope of inducing any action, we would press on the new Council the duty of taking renewed proceedings against the illegitimate drug companies on the lines which were so nearly successful in Edinburgh a year ago. It will be remembered that a Scotch judge decided in favour of the very reasonable contention that, though a limited company may not be liable to a penalty for trading as a chemist and druggist, yet that the individual shareholders, if not qualified, were thus liable if they associated together to do what they might not do separately. This judgment was overruled by the highest court in Scotland, but there was every reason for testing the opinion of the English courts on the important points thus raised. The Pharmaceutical Council in August last feebly protested against some remarks made by one of the judges who heard the case, resolved to give the subject further consideration, and straightway buried the whole business in oblivion. Perhaps one of the new members of the Council will have the curiosity to ask for the result of the further consideration which the last Council mysteriously hinted they would give to this topic.

DRUGGISTS AS DRAM SUPPLIERS.

TEMPERANCE advocates in Scotland and Ireland are exercised at present, and have been for many years, by two forms of intemperance common to the most depraved in the abstracta of the populations of the two countries. In Scotland the Sunday-drinking question was supposed to have been settled long ago, when the Forbes-Mackenzie Act came into force, shutting up all public-houses from eleven o'clock on Saturday nights until eight o'clock on Monday mornings; and it is a notorious fact that this Act, whatever good it may have done—and it undoubtedly has been the means of controlling the drink traffic within reasonable bounds—has not put an end to Sunday drinking. In the larger towns across the Tweed there are ways and means of satisfying the Sunday morning's craving which would have astonished Forbes-Mackenzie. Shebeens, in spite of frequent convictions and heavy fines, flourish exceedingly; bogus clubs carry on their traffic more openly; and the thirsty wretches who cannot afford either of these luxuries have found that some druggists will supply an article which temporarily satisfies their inward craving. This article is methylated spirit. Inasmuch as

the legislature a little more than thirty years ago allowed the use of duty-free spirit in the arts by rendering such spirit "so impalatable that it would effectually repel ordinary drinkers," we may take it that consumers of alcohol in this form are extraordinary drinkers—persons whom Acts of Parliament cannot cover.

It is at first sight somewhat difficult to understand how this peculiar drinking habit should have arisen in Scotland, but the reasons are not far to seek. First there is the fact that the use of spirits as a beverage is much more common in Scotland than in other parts of the kingdom; whisky is the national drink, "the glass" for joy or sorrow, "the bottle" for wedding or funeral, and, above all, the tippie for the Saturday night's carousal. In the year ending March 31, 1886, Scotland's consumption of spirits was 6,297,365 gallons, or 1.55 gallon per head of the population; Ireland came next with 4,754,670 gallons, or 1.016 gallon per head, and England consumed 15,290,816 gallons, or 0.516 gallon per head. Scotland had then her 128 distilleries as compared with England's 11 and Ireland's 28, and she manufactures nearly half of the spirits distilled in the kingdom. It scarcely needs these figures, however, to prove that whisky is the common intoxicant of Scotland, for it is a fact which is generally admitted and deplored in pulpit and press over the whole of broad Scotland. "Whisky is a bad thing, especially bad whisky," runs the saying. Unlike beer, its after effects are not relieved by such mild beverages as ginger beer, and hence it is that people drink, apparently with some show of satisfaction, the nauseous and pungent methylated spirits. For the supply of this druggists are wholly responsible, as there are no oil and colourmen in Scotland, and drysalters are not numerous. If such shops existed more generally it is questionable if police regulations would permit them to be opened on Sundays. It is probable that the extent of the trade in methylated spirits has been much exaggerated, as, for example, in the Report of the Superintendent of the Edinburgh Police, which we published a fortnight ago; but few druggists are not asked for it on Sundays, though the more respectable refuse to supply it because they suspect it is to be used as a beverage. It would be well for themselves if druggists in the poorer quarters of the large towns would follow this example, for every pennyworth which they sell, no matter how plausible the story of the purchaser may be, renders the seller liable to a fine of 100*l.* if it be used as a beverage—so the Board of Inland Revenue declared in a letter which we published in 1877. That decision of the Board still holds good, and was acted upon in 1885, when half-a-dozen Glasgow druggists and doctors were fined in sums from 10*l.* to 40*l.* for the sale of the spirits on Sunday. It is inconceivable how intelligent and cultured men, such as druggists generally are, should lend themselves to the encouragement of this pernicious habit; the explanations of purchasers are so transparently unreal as to amount almost to an indication that the spirit is not to be used for the purpose stated. One after another, for example, declares that he is suffering from rheumatism and requires the spirit for outward application, or else that he is a French polisher who "has to go early next morning to a job in the country." The licence for the sale of methylated spirits carries with it certain responsibilities which the licensee should keep well in mind. The State, for the purpose of encouraging the arts and manufactures, allows the use of spirit duty free, and it is the duty of the licensee to discourage the improper use of the same; the spirit contains certain noxious and harmful ingredients, and is so much higher in alcoholic strength than alcoholic beverages that when swallowed the results are of the most deplorable nature. The man who violates the law of the realm and common humanity by lending himself to the encourage-

ment of the evil deserves all the punishment which the law permits.

Much of what has been said regarding the consumption of methylated spirits in Scotland is applicable to the use of ether in Ireland. Whisky to the Irish is what it is to the Scotch, and if it could be ascertained how much potheen is yearly consumed in Ireland, it is probable that we should find the drink-bill fairly equal in both countries. In one respect, however, Ireland is quite distinct from both England and Scotland, and that is in her consumption of methylated spirit, the total in the fiscal year 1887 being 760 gallons as compared with 1,732,848 gallons, or .085 gallon per head in England, and 448,372 gallons, or .112 gallon per head in Scotland. It is evident from these figures that methylated spirit is not in common use in Ireland; if it were we should not be surprised to hear that it was largely used as a beverage, for certainly it is no worse in taste and effects than the rank and amylic potheen. It is not quite unknown, however, as is shown by the inquest in Dublin held last Saturday, which we report, where it was shown that drinking methylated spirit had had a fatal effect in at least one case. But the national illicit drink of Ireland appears to be ether. In 1877 public attention in this country was first called to the use of ether as a beverage by Mr. Henry N. Draper, whose communication in the matter is referred to in THE CHEMIST AND DRUGGIST, 1877, page 234. At that time ether tipping was very prevalent, and caused terrible havoc among the lower classes—indeed, the habit was so common in some places that priests took to cursing ether in order to get their congregations to shun it. Even then the habit was not a new one, and, although it was supposed to be on the wane, the recent petition to Parliament from the National Church of Ireland, in which the legislature was asked to devise some means to regulate the traffic in ether, shows that the vice has renewed its vigour. It is said that the ether sold is rather weak, and contains a considerable percentage of unaltered spirit, and that this is methylated spirit, which has as evil an effect upon the drinkers as the ether itself. It is possible that the sale of such a mixture can be treated as the sale of methylated spirit for an illicit purpose may be treated; in any case, it is certain that no one more readily than chemists themselves will sympathise with any legislative attempt to prevent the drug shop being degraded into a dishonourable competitor with the licensed dram-shop.

MATERIA MEDICA NOTES.

Brazilian Gum Arabic. IN our last issue we gave some information supplementary to previous remarks regarding the gum arabic consigned to this country from Brazil. Replying to inquiries made at the instance of the Kew authorities, Her Majesty's Consul at Pará states that two kinds of "gum" have appeared in the market there, viz., "Jatuba," the resin of *Hymenia Courbaril*, a varnish gum well known in this country as Brazilian anise or copal, and angico, a reddish gum said to be obtained from *Acacia angico*, Mart., and to be soluble in water. It is probable that the latter is the source of the Brazilian gum arabic. Certainly, however, it is not the hymenia resin, which is quite unlike it in appearance, while "angico" is what is commercially known as a water-gum. During the past week we have had an opportunity of testing the gum in regard to its adaptability for pharmaceutic purposes, and also of comparing it with a sample of gum imported as "gum angico," for which we are indebted to Dr. Charles Symes, of Liverpool. Our sample is in large tears, some of them weighing as much as 400 to 800 grains, with smooth or wrinkled surface, translucent, and of a dark amber colour. The gum powders with

difficulty, being not quite dry, and dissolves entirely in water, 1 part of the gum and 2 of water forming a mucilage as thick as the Pharmacopoeial mucilage of acacia. This mucilage is possessed of excellent emulsifying properties, and is equal in this respect to the official acacia. It is not, however, so adhesive as acacia, but its ready solubility and moderate viscosity should make it a welcome addition to the collector's stock of acacia substitutes. Dr. Symes's specimen is quite different in appearance and property from our own sample. It is of a dark red colour, and is only partially soluble in water, swelling up and forming a thick mass with twice its weight of water. In his "Notes on Brazilian Drugs," communicated to the Southampton meeting of the Pharmaceutical Conference, Dr. Symes said that "in the 'Formulario ou Gui Medica' of Chirnoviz, it is mentioned as the product of *Acacia angico*, and is said to be good for most complaints; the same tree yielding an astringent bark. . ." As regards its medicinal properties the only remark which accompanied it was similar to that of Chirnoviz, "usanas molestias do peito," "useful in chest complaints." Although this gum differs so markedly in appearance from the Brazilian gum arabic, the mucilage of the latter gives very similar reactions to those which Dr. Symes noted of his gum arabic, viz., no reaction with ferric chloride and lead acetate, and precipitates with ammonium oxalate and alcohol, the latter being more abundant with the new gum. It is probable that both gums are the product of allied or similar trees, and it would be important to have this point determined, for the new gum is likely to be a useful one, and if it were to be known commercially as gum angico, it is probable that consignments of the insoluble gum might be made, and avoid disappointment.

Johore Ipecacuanha. Mr. Trimen, the Director of the Ceylon Botanic Gardens, in his last reports refers to the production of ipecacuanha in India, and states that as early as 1848, or sixteen years before the first plants reached India, ipecacuanha was introduced in Ceylon, but that its cultivation in that island did not meet with any considerable amount of success, and it does not look as if we could ever expect to receive the drug in commercial quantities from Ceylon, especially if, as now seems probable, the Straits Settlements should furnish considerable quantities in the near future, for the use of the root is limited, and any successful cultivation on a large scale in various countries would soon bring the price down to a level which would cease to pay the cultivators. The sample of Johore ipecacuanha which was exposed for sale in Mincing Lane last week does not differ materially from that which was first imported. If anything it is more varied, thin and stout roots, possessing the grey and reddish surfaces, making up the parcel. The roots which we selected for analysis were a fair sample, the woody column was somewhat thick. The percentage of emetine we found in the specimen is 1.4, somewhat lower than the specimen examined by Mr. Ransom afforded; but this may be accounted for by the thickness of the woody column, and the difference is no more than may be expected of two different samples of root.

Java Coca Leaves. For about two months a parcel of coca leaves from Java have been vainly endeavouring to attract a purchaser in Mincing Lane. The leaves were grown at Tjiomas, in the neighbourhood of Buitenzorg, in the north-eastern part of Java, not far from Batavia. Tjiomas is chiefly a coffee-producing district and has not hitherto been known as one where efforts were being made in the propagation of exotic drugs. This is apparently the first crop of leaves gathered on the plantation, and externally it leaves much to be desired. The leaves have either been badly harvested or seriously damaged on the

voyage. They are unequal in size, of a dull brownish-green colour, but contain, we find, 0.96 per cent. of cocaine, which is not at all a low percentage. But before the Java leaves can take a place in this market, or command confidence, greater attention should be paid to the harvesting and packing. The parcel contains many miniature leaves, which are comparatively worthless, and the colour is far from being tempting to buyers, who are mostly guided by the appearance of the article only. The present low price of cocaine is not encouraging to the Java and East Indian planters, but it is important that they should ascertain the correct conditions for cultivation, and the best methods of placing the produce on the market, so that they may with advantage start the industry when opportunity occurs.

Bolivian Cultivated Cinchona.

South Americans allowed the planters of the Old World a good start in the cultivation of cinchona before they thought fit to repair the waste and the ravages in their native woods by rearing the bark-yielding tree in a systematic manner. It is perhaps a tribute to Spanish indifference to progress that a commencement in the cultivation of cinchona was first made in Bolivia ten years ago by German planters, one of the most successful being Mr. Otto Richter, of Cochabamba. Plantations exist at Mapire Longa, Yungas, and Mapire, north and east of La Paz, and in those localities over six million plants were first placed in cultivation. For some time the Bolivian cultivated calisaya, sent to our market in quill form, has been a standing feature in the London bark auctions; but quite recently one of the principal cultivators has made a bold attempt to provide us with a cultivated substitute for the so-called fat Bolivian calisaya, which is a bark much sought after on the Continent, and for which prices are paid greatly in excess of its mere alkaloidal value. A sample of this cultivated fat bark, kindly submitted to us by the importers, shows it to have been carefully harvested. It is quite dry and powdery, leaving little fibrous material. An assay of the bark showed us that it contains 3 per cent. of total alkaloids, a percentage considerably under the standard of the British Pharmacopœia, but comparing favourably with the quality of many samples of natural yellow cinchona. Unfortunately the appearance of the bark under notice is somewhat against it. Of course the trees on Mr. Richter's plantation are still young, and do not, therefore, yield such stout bark as the old cinchonas which provide the ordinary fat bark of commerce. The pieces, in fact, are merely, if they may so be called, flattened quills, one-eighth of an inch in thickness, and which in the ordinary process of drying would have curled up into quills, but were artificially prevented from so doing. The colour is partly a deep orange, partly streaked and spotted with rusty brown, which gives the bark a queer look. Druggists, therefore, who merely appreciate appearance shun it; but we understand that on the Continent the bark is beginning to find a ready sale, and it might be worth the while of our own export druggists to devote their attention to this new variety before it gravitates, like too many other drugs are already doing, towards rival markets.

A notice was published in the *London Gazette* of May 18 as follows:—"Treasury Chambers, May 17, 1888. Prohibition, under Section 5 of the Customs and Inland Revenue Act, 1868. The use in beer of a certain substance. Whereas it appears to the satisfaction of the Lords Commissioners of Her Majesty's Treasury that the chemical or artificial extract or distillate from coal tar, commonly called or known by the name of 'saccharin,' is capable of being used in the manufacture and preparation for sale of beer, and that the use of

the said extract or product is calculated to affect prejudicially the interests of the Revenue. Now the said Lords Commissioners, under the power conferred upon them by Section 5 of the Customs and Inland Revenue Act, 1868, give notice that the use of the said extract or product, commonly called or known by the name of 'saccharin,' in the manufacture and preparation for sale of beer, is hereby prohibited until further notice. Dated this 17th day of May, 1888.—Herbert Estlin Maxwell, W. H. Walrod. NB.—A penalty of 50*l.* is imposed by the said section for any breach of this prohibition.

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The full list of officers of the fifty-eighth meeting of the British Association which is to be opened at Bath on Wednesday, September 5, has been arranged. Sir Frederick Bramwell, F.R.S., member of the Institute of Civil Engineers, is president-elect, and will deliver the inaugural address. The vice-presidents are the Earl of Cork and Orery, K.P., Lord Lieutenant of Somerset; the Marquis of Bath, the Bishop of Bath and Wells, the Bishop of Clifton, the Mayor of Bath, the Mayor of Bristol, Sir Frederick Abel, the Archbishop of Bath, the Rev. Leonard Blomfield, Professor Michael Foster, Mr. W. S. Gore-Langton, J.P., D.L., Mr. H. D. Squire, J.P., D.L., Mr. E. R. Wedekhouse, M.P., Colonel E. P. Lennie, M.P., Mr. Jerom Murch, J.P., D.L. The local secretaries for the meeting will be Mr. W. Pumphrey, Mr. J. I. Southern, M.D., C.E., Mr. B. H. Watts; and the local treasurers, Mr. A. Hammond, Mr. J. Murch, and Mr. John Stone. The presidents of the various sections will be the following:—A.—Mathematical and Physical Science: Professor G. F. Fitzgerald, M.A., F.R.S. B.—Chemical Science: Professor W. A. Willen, D.Sc., F.R.S., V.P.C.S. C.—Geology: Professor W. Dorr Darwin, M.A., F.R.S., F.G.S., F.S.A., D.—Biology: W. F. Fishenden-Dyer, C.M.G., M.A., D.Sc., F.R.S., F.L.S. E.—Geography: Colonel Sir C. W. Wilson, B.E., E.C.B., E.C.M.G., D.C.L., F.R.S., F.R.G.S. F.—Economic Science and Statistics: The Right Hon. Lord Bramwell, F.R.S., F.S.S. G.—Mechanical Science: W. H. Preece, F.R.S., M.Inst. C.E. H.—Anthropology: Lieutenant-General Pitt-Rivers, D.C.L., F.R.S., F.G.S., F.S.A. There will be on Thursday evening, Sept. 6, at 8 P.M., a *soirée*; on Friday evening, September 7, at 8.30 P.M., a discourse on "The Electrical Transmission of Power," by Professor W. E. Ayrton, F.R.S.; on Monday evening, September 10, at 8.30 P.M., a discourse on "The Foundation Stones of the Earth's Crust," by Professor T. G. Bonney, D.Sc., LL.D., F.R.S., F.S.A., F.G.S.; on Tuesday evening, September 11, at 8 P.M., a *soirée*; on Wednesday, September 12, the concluding general meeting will be held at 2.30 P.M. Excursions to places of interest in the neighbourhood of Bath will be made on the afternoon of Saturday, September 8, and on Thursday, September 12.

* *

Pure Hot Air. In last Tuesday's *Times* there is an account of an invention by Mr. W. A. Gibbs, of Gillwell Park, Chingford, Essex, by which it is claimed that a current of perfectly pure air at a temperature of 300° Fahr. is produced. Mr. Gibbs's purpose has been to provide means for drying the tea of Assam by means of the native coal or from waste wood without admitting to the delicately flavoured leaves any of the deleterious vapours which are produced by the combustion in the ordinary manner. According to the *Times* reporter, this object has been attained. The only description given of the means adopted is that the arrangement "consists of a brick chamber, 6 feet long by 2 feet wide and 2 feet high, built upon the ground. At one end is a feed chamber and a fuel chamber, and at the other a powerful exhaust and blast fan. Placed immediately between the chamber and the fan are baffle plates, splitting plates, a standing bridge with perforations at the base, and a hanging bridge with perforations at the front." It has also been requisite to provide for the exact proportion of air admitted, so as to ensure perfect combustion. This has been the special difficulty, but having solved this and set his furnace going, the result is thus described:—"Issuing from a fan-mouth 12 inches in diameter comes rushing a column of hot air, marking on the pyrometer at its exit a steady uniform temperature of 300° Fahr. Not a trace of smoke or fume is visible to the eye; not a taint of any kind is perceptible to

the taste or smell. Standing, as we did, in the range of this simoom, with the hot blast full in the face, the heat is, of course, excessive, but the stream of air is perfectly pure. Save in the matter of temperature, it affects neither the eyes, the throat, nor the nostrils. As a proof of this purity some choice tea which had been saturated with hot water was placed in the hot air current, and when re-dried was pronounced by an expert to be wholly free from any imparted taint or taste." It is clear that if this perfect combustion and purification can be really attained by mechanical arrangements, the invention will soon be applied to many other purposes besides tea-drying. It will probably be applied in many chemical processes and it may be found of value in all heating apparatus, as it appears to ensure the utmost economy by extracting from the fuel all the heat which it is capable of yielding.

* *

The
Linnean
Society.

The Linnean Society celebrated its centenary on Thursday last, May 24, a date distinguished in the calendar as the birthday both of Linnaeus and of Queen Victoria. The founder of the Linnean Society and its president for the first forty years of its career was Sir James Edward Smith. Smith was born at Norwich in 1759, and in 1783 came to London to pursue his medical studies. In that year Linnaeus's son died at Upsala, and his representatives wrote to Sir Joseph Banks, offering Linnaeus's herbarium, zoological collection, books, and manuscripts for 1,000 guineas. Banks was a friend of Smith's and passed the offer on to the latter, who accepted it. Only just in time, however; for, finding the collection was leaving Sweden, the educated people of that country tried to prevent the disgrace, and King Gustavus III, returning at the time from France, sent a vessel to the Sound to intercept the precious cargo, but was too late. Smith took the collection to a house in Chelsea, and, abandoning a medical career, devoted his life to botanical work. On February 26, 1788, he, with six other naturalists, met at the Marlborough Coffee House, Great Marlborough Street, and founded the Linnean Society. His associates were Goodenough, afterwards Bishop of Carlisle, and author of a monograph on British sedges; Thomas Marsham, an eminent entomologist; Dr. Jonas Dryander, a former pupil of Linnaeus; Swainson, a zoologist; Beckwith, an entomologist; and James Dickson, a young Scotch gardener devoted to mosses, who had a shop in Covent Garden. At the first general meeting of the Society, held on April 8, 1788, Sir James Smith delivered an address on "The Rise and Progress of Natural History," and this essay—a very valuable one—was the commencement of the long series of important papers which the Linnean Society has contributed to scientific records and research. A royal charter was granted to the Society in 1802. In 1826 the Zoological Society branched out from the Linnean Society. Sir James Smith died in 1823; his Linnean collection was purchased by the Society for 3,000*l.*, which has acquired besides a magnificent collection of books and art treasures, including a bust of Linnaeus by Thorwaldsen. After Sir James Smith its presidents have been Lord Stanley (afterwards Earl of Derby), the Duke of Somerset, Bishop (Stanley) of Norwich, Robert Brown, Thomas Bell, George Bentham, Professor Allman, Sir John Lubbock, and Mr. William Carruthers, the head of the botanical department of the Natural History Museum, who still occupies the chair.

* *

Dishonoured Bills. Mr. Hunter, M.P. for North Aberdeen, has brought in a Bill for providing greater facilities for the recovery of money due upon dishonoured bills of exchange and promissory notes. He proposes that when a bill has been protested for non-acceptance, or a bill or a note has been dishonoured on maturity and protested for non-payment, the holder may within six months present it for registration to a master of the High Court, or with regard to small sums to a registrar of an inferior court. Thereupon it will be entered by that officer on the "Register of protested bills of exchange and promissory notes." But the name of the drawer of the bill or of the indorser of the bill or note is not to be entered on the register until the holder can satisfy the officer that a notice of dishonour has been personally served upon such drawer or indorser or sent in a registered letter to his last known place of abode or of

business at least two days before presentment. After registration the holder is to be entitled to judgment against the persons whose names are signed or indorsed on the bill or note and registered (except where the indorser is qualified to be "without recourse") for the amount and interest specified, and also for the costs incurred in protesting and registering. There are special provisions entitling a judge to order execution to be stayed and an issue to be tried, if he should see fit. The register of protested bills and notes is to be open to inspection on payment of a small fee.

TRADE-MARKS APPLIED FOR.

The *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds for objection to the registration of any of the following marks may, within two months of the date of this journal's notice in duplicate at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." The address of the Patent Office is Southampton Buildings, London, W.C.

From the "*Trade Marks Journal*," May 23, 1883.

"DR. RÖGER'S PILLS," and other wording, with representation of castle; for pills, ointment, and vegetable balsam. By Samuel Fry, chemist and druggist, Bishop's Waltham. 68,145.

Figure of a herald blowing trumpet, and wording, in circular label; for artificial teeth. By Jas. Macdold (trading as Macdonald's Free Dentorium), 29 Piccadilly, Manchester. 68,496.

"GOLDEN HOP TONIC BITTERS," with directions, &c. on dark background, on a large oblong label; for a medicine. By G. L. Napier, pharmaceutical chemist, 56 South Street, Exeter. 69,394.

"COMPOUND GINSENG BITTERS," and other wording in English and Chinese characters, on bordered oblong label; for a medicine. By A. S. Watson & Co. (Limited), 106 Fenchurch Street, E.C., Hongkong, and Malacca. 70,573.

"WATTAM'S ANTI-FILARIAL MIXTURE," and other wording, with monogram, on oblong label; for a cattle-medicine. By F. Wattam, 69 Scotgate, Stamford, Lincolnshire. 71,392.

"TURNER'S UNIVERSAL HARNESS PRESERVER," and other wording, with monogram, in oblong label; for a leather-dressing. By Sidney Oxley (trading as E. L. Tuer & Co), Palissy Oil Works, Sheffield. 71,414.

"CUTINE," with facsimile of applicant's signature; for a skin-medicine. By W. T. Quick, chemist, Lympstone, Devon. 71,846.

"BULL'S HEAD BRAND," with representation of a bull's head; for chemical substances (71,895), and for mineral and vegetable oils (71,896). By Middleton, Kirkpatrick & Barr, 4 Cullum Street, E.C., Newcastle-on-Tyne, and Glasgow.

"MELONADE" and "SALINADE," with facsimile of applicant's signature; for non-alcoholic aerated beverages. By Rankin & Borland, 7 King Street, Kilmarnock, N.B., pharmaceutical chemists. 72,197-8.

"BAKER'S PURE MEXICAN BLACK LEAD," with representation of cowboy on horseback swinging lasso; for black lead. By Edward Baker & Sons, 135 High Street, Stratford, E., Birmingham, and Manchester. 72,621.

Figure of young woman laughing; for perfumery and toilet articles. By the Kennedy Company (Limited), patent medicine manufacturers, 112 Southampton Row, W.C. 73,036.

"MELSTILLA OR HONEY DROP"; for a liquid toilet preparation. By George Stocker, chemist, 1 East Southampton, Exeter. 73,238.

Figure of lion rampant, with monogram in circle, on square label; for cocoa. By the White Lion Cocoa Company (Limited), Acton Street, Haggerston, E. 73,544.

Foreign and Colonial.

POTASH AND HYDROCHLORIC ACID MANUFACTURE IN GERMANY.—Under the auspices of the united chemical factories at Stassfurt in Germany, works for the manufacture of potash salts are now being erected which will probably be ready on Oct. 1. The union also intends at an early date to commence the manufacture of hydrochloric acid.

THERE are said to be 108 manufacturers of proprietary medicines in New York State, and their total annual production is valued at \$4,339,178, on a capital of \$3,512,430. In the United States there are 563 laboratories exclusively used for proprietary medicines, and having a yearly output valued at \$14,682,492, on a capital of \$10,620,880.

THE DIRECTOR OF THE GOVERNMENT CINCHONA GARDENS in Java, in his report for the last quarter of 1887, states that owing to the greatly increased prices which have recently been obtained for druggists' quills, not only of the *Succirubra* but also of the *Calisaya* and *Josephiana* varieties, he has commenced packing *Ledgeriana* bark, in so far as this variety yields fine quill bark, into cases. This experiment is especially desirable because, in a few years' time, *Calisaya* and *Josephiana* quills will have ceased to be harvested.

ROSES IN THE CAUCASUS.—Plantations of roses on a large scale are to be established in the province of Kutais of the Caucasus, so that there may be an extensive native manufacture of the otto of roses. At the present moment this is largely exported from foreign States, principally Bulgaria and Turkey, into Russia, and it is the object of the Minister of Domains in promoting this enterprise—which, it may be mentioned, is only an expansion of an earlier experiment at Baku—to oust the foreigner and substitute a native industry.

THE SALE OF PATENT MEDICINES IN NEW YORK.—A Bill for prohibiting the sale of patent or secret medicines has been introduced into the Assembly of the State of New York by Mr. J. W. Smith. It provides that no person or firm shall sell any medicinal preparation without filing the formula of the preparation with the State Board of Health, and receiving a license or certificate from that body. It further provides that no so-called secret or proprietary medicine shall be sold, unless there is a printed formula showing the nature of the compound on the bottle, and also the words, "Sale authorised by New York State Board of Health."

COMBINATION OF CANADIAN SOAP-MAKERS.—A combination has been formed among the soap-makers in Canada, with its headquarters at Toronto, and the first act of the convention has been to raise the price of soap $\frac{1}{2}$ c. per lb. The duty on common brown and yellow soap in Canada is $\frac{1}{2}$ c. per lb., or an average of 33-1.3 per cent. On common soft and liquid soap the duty is 20 per cent.; on Castille soap 2c. per lb., or an average of 42 per cent. This protection enables the Canadian soap-makers to charge their own prices, and when they combine, as has now been done, they can raise the price to nearly the extent of the duty without any danger of foreign competition.

THE AMERICAN DRUG TRADE AND THE LATE MR. ROBBINS.—The members of the American drug trade assembled after the death of the late Mr. D. C. Robbins to pass resolutions of sympathy with the family of the deceased gentleman, and of appreciation of the services rendered by Mr. Robbins to the trade of which he formed part, especially as a member of its special committee on Reform of Custom House Methods, in connection with the repeal by Congress in 1874 of the *Moiety Law*; in his reports on the subject of bankruptcy, and his efforts to secure the passage by Congress of a new National Bankrupt Law. These resolutions have been engrossed on parchment and sent to Mr. Robbins' relatives in the form of an album covered with sealskin leather and finished inside with moire silk.

THE New York City College of Pharmacy celebrated its fifty-eighth anniversary by a dinner at Delmonico's on April 3. There has heretofore been some difficulty in making satisfactory arrangements for the annual dinner, and for this reason it was omitted last year. The proposed erection of new college buildings has, however, caused an awakening of interest in the college, and the committee found that without

personal solicitation a much larger number of subscriptions were received than ever before. Mr. T. J. Macmahon was chairman of a company of two hundred, and after they had done justice to a dinner such as Delmonico's only can serve, a long toast list was gone through. Amongst the guests and speakers were the Hon. Stewart L. Woodford, Professor G. H. F. Markoe, Professor Jos. P. Remington, Hon. Chauncey M. Depew, Dr. J. E. Simmons, President of the Board of Education. Chauncey M. Depew was in his happiest vein, and kept the guests in roars of laughter, and Professor Remington spoke clearly, forcibly, and fluently on the important subject of education which he is so well fitted to handle. The room was decorated with American flags, and a band furnished excellent music throughout the evening. One of the features of the occasion was the singing of "My Country, 'tis of Thee," under the preceptorship of Mr. Geo. J. Seabury, who also led, when, at the close, all stood and joined in the familiar strains of "Auld Lang Syne."

THE IMPORTS INTO AND EXPORTS from Spain during the years 1885 and 1886 included, according to official statistics, the following articles of chemical and pharmaceutical interest:—

Imports.

	1885		1886	
	Kilos.	Pesetas	Kilos.	Pesetas
Cocoa	7,201,466	14,645,960	6,883,471	14,023,433
Chemical and pharmaceutical products ..	48,541,614	15,225,026	56,916,090	15,851,813
Crystal and glassware ..	6,246,046	4,275,945	6,861,028	4,860,679
Cinnamon	375,030	1,241,166	355,466	1,174,468
Perfumery and ess. oils ..	160,733	1,853,304	170,606	1,364,848

Exports.

	1885		1886	
	Kilos.	Pesetas	Kilos.	Pesetas
Quicksilver	1,014,889	5,074,445	541,414	2,707,070
Oil (common)	42,125,858	40,019,565	15,114,012	14,358,312
Soap (common)	5,719,117	4,003,382	6,642,425	4,637,098
Saffron	42,303	3,891,806	31,378	2,886,776
Anise	566,965	521,608	628,633	633,542
Cumin	83,261	67,078	85,622	63,553
Liquorice root	2,584,495	775,483	3,729,024	932,256
" paste	591,595	828,235	419,204	565,925
Chocolate	121,118	363,304	162,462	457,386

BARILLA IN INDIA.—The manufacture of barilla has latterly been the subject of some attention on the part of the Government of Madras. In the Punjab an alkali resembling barilla is obtained from the saline soils, which contain from 30 to 50 per cent. of carbonate of soda. This is used in India for all purposes, including washing and bangle-making. There are certain plants in Southern India from which barilla could probably be obtained, more especially *Salicornia brachiata*, *Suaeda fruticosa*, and *Suaeda nudiflora*, which, according to Surgeon-General Bidie, grow along the coast of the Presidency. In 1885 an experiment was made in the manufacture of the barilla from certain plants, but the resultant salt was the chloride, not the carbonate, of soda. It is possible therefore that the plants were not the proper kind. Further inquiry was made by the Government as to the possibility of getting a supply of barilla plants, and these being unsatisfactory the Government now wish to know "whether fairly pure carbonate of soda is obtained in the Presidency from the saline soils known as *dhobies' earth*; and whether such carbonate of soda can be manufactured at a price which will allow of its competition with that obtained by the chemical treatment of common salt." This sounds like going back a century or so.

"W. R. DUSTIN has been studying the formation of alkaloids in plants." That is how an American paper puts it.

RATS do not like their holes to be stuffed with newspaper pulp dipped in a solution of oxalic acid and forced into the holes when wet. Where that is the case they make some other dwelling a home.

Trade Report.

Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., May 24.

THERE has been very little business done this week, the Whitsun holidays having contributed to still further depress a market already suffering from extreme languor, nor is there much prospect of a better state of things for the remainder of the month, as the Epsom races will cause a break in next week's business. In the chemical market a better feeling, brought about by the approach of summer weather, exists for citric acid, but tartaric and oxalic acids are, if anything, rather weaker. Quinine is practically without alteration, although the improved tone manifested at to-day's cinchona auctions, the only public sales of interest to the drug trade held this week, causes an anticipation of improvement in some quarters. Among heavy chemicals, soda crystals and sulphate of ammonia are also dearer, but sugar of lead is worth less money. In drugs and druggistries there are very few alterations. Insect flowers, chamomiles, and cod-liver oil keep firm, several spices are dearer, shellac and gambier have also slightly risen in value, and turpentine is also quoted higher. But, on the other hand, opium is very depressed, and glycerine and golden seal root are weaker.

ACIDS.—Citric has improved steadily, and closes firm with a rising tendency, 1s. 7½d. having been paid on the spot, and 1s. 8d. being asked both for spot and forward. Lemon-juice is reported much dearer in Sicily. Oxalic neglected at 3d. to 3½d. per lb. Tartaric stagnant; English, 1s. 6d. to 1s. 6½d.; foreign, 1s. 5½d. to 1s. 5¾d. per lb.

AMMONIA SALTS.—Carbonate very depressed at 4d. per lb. Sal ammoniac quiet; firsts at 34s.; seconds at 32s. per cwt. Sulphate firmer with a rising tendency. 11l. 17s. 6d. is to-day quoted for Beckton sulphate. The continental markets do not in any way respond to the present quotations here, and there is not much prospect of a very large demand for the summer and autumn months. For the past agricultural season, the shipments to the Continent have not come up to the figures of previous years, there being a deficit of 3,000 tons; which might, indeed, have been even greater, in view of the large consumption of nitrate of soda.

CAMPHOR.—Crude remains very firm, although no higher price than 77s. 6d. per cwt. for Japan on the spot is yet reported to have been paid. China camphor is quoted a little cheaper, but it is only nominally in the market. The reports from China speak of a rising market and a very good demand.

CASCARA SAGRADA still held at 60s. per cwt. on the spot.

CHAMOMILES unchanged at 6l. 5s. for best Belgian flowers of the last crop. The stock is now a very small one.

CHINA ROOT is offering up to 18s. per cwt. for the best quality.

CINCHONA.—The fortnightly auctions were held to-day instead of on Tuesday, and passed off comparatively favourable for holders, who were able to dispose of nearly the whole of the supply catalogued, with good competition at full to slightly dearer prices, the unit being stated to have averaged fully 2½d. The principal buyers were the agents for American and German manufacturers. Altogether 3,774 packages were catalogued, composed of 1,632 Ceylon, 706 Indian, 74 Java, 8 African West Coast, and 1,354 South American bark. Of the Ceylon bark very little was bought in, and a much larger proportion than usual of American bark was sold. The following prices were obtained:—

CEYLON AND EAST INDIA CINCHONA: *Succirubra*—branch, thin to good, 1¼d. to 2½d.; chips, ordinary mixed with

branch to fine bright strong, 2d. to 6½d.; root, 2½d. to 3d.; druggists' quills, rather weak, 7½d.; renewed, dull to fair 3d. to 8½d. *Officinalis*—chips, weak and mixed with brich, 2½d. to 4d.; stem chips, 5½d. to 6d.; common to good savings, 3d. to 6d.; root, 7½d. to 11d.; druggists' quill, 1d.; renewed dull to fine strong bold, 4½d. to 1s. 3d. per lb. **CINCHONA.**—*Ledgeriana*—chips, small and dusty mixed with quill, part damaged, 4½d. to 6d.; fine bold, 1s.; fine root, 1s. 2d. per lb. **AFRICAN CINCHONA.**—Eight bales, imported via Lisbon, of nondescript character, together 1,450 lbs., sold at 3d. to 6d. Of **SOUTH AMERICAN CINCHONA** only one half was sold, mostly *Cuprea* of old import, at 2d. to 4d.; and cultivated Bolivian *Calisaya*, fair to fine bold druggists' quill, at 8½d. to 1s. 2d. per lb.

CREAM OF TARTAR steady but unchanged at 121s. 6d. per cwt. for first, and 118s. per cwt. for second quality.

GALANGAL ROOT.—The nearest quotation is 7s. 3d. to 7s. 6d. per cwt.

GAMBIER.—Block made a further advance just before the holidays, when 23s. per cwt., reweight, was paid on the lot, and 22s. 6d. for April-May steamer shipment. Since then we have not heard of further business.

GLYCERINE weaker; 68l. being asked for double distilled, s.g. 1,260, by the German makers, but perhaps a slight concession might be made for quantities.

GOLDEN SEAL ROOT is reported cheaper from America, 2s. 9d. being the price now quoted.

GUM ARABIC very quiet, with little inquiry except for the best varieties, which remain firm. The usual public lots have not been held this week, nor do we hear of any private business worth recording. In Liverpool also the market is very quiet, and buyers are rather indisposed to pay the prices demanded by holders. Some arrivals of *Alexandrian* gum have taken place at Liverpool, including a small parcel of Arabic sorts. The sales of *Brazilian* gum are comparatively small, although there continues to be a fair inquiry for this description; 55s. to 57s. 6d. has been paid for fair medium part blocky, and 60s. to 65s. per cwt. for good coloured tree gum. A moderate quantity of *Egyptian Amrad* has also been sold at 85s. per cwt. In *Bordeaux Senegal* gum continues to command excessively high prices, a parcel of 200 lbs. recently imported having lately realised as much as 7l. 0s. per cwt. But the time is now approaching when considerable arrivals from Senegambia will be due, and when these arrive it is not expected that holders will be able to maintain their quotations. The value (in Egyptian £, worth 20s. sterling) of the gum exports from Suakin since 1879 is as follows:—

1879	1880	1881	1882	1883	1884	1885	1886
207,684	160,265	158,127	116,435	56,609	2,414	2	1,50

INSECT FLOWERS.—The stock at Trieste, which was 82,900 kilos, at the end of January, has successively been reduced to 48,400 kilos, at the end of February, 45,100 lbs. at the end of March, and 31,400 kilos, at the end of April, while since that time large deliveries have been made, and there are not now over 20,000 kilos left in stock, which must last until the new flowers arrive. For the latter, higher prices are expected to rule. Meanwhile we quote ten flowers at 176s., half open at 182s., and closed at 198s. per cwt. c.i.f. terms.

IODINE steady at 9d. per oz. for crude, Resublimed 13s. 1d., iodide of potassium 11s. 3d. per lb.

IPECACUANHA.—We have received a further consignment of 20 serons per *Condor*, via Antwerp.

NUX VOMICA.—Another parcel of 500 bags has just come to hand per *City of Agra* from Calcutta.

OIL (CASTOR).—Very little business is reported. *Calcutta* firsts steady at 4d. per lb.; fair *Madras* seconds sold at 4d.

OIL (COCONUT).—There is little business to report in our market, which remains flat, while holders would be prepared to accept lower prices, especially for forward delivery. For Ceylon oil 23l. 10s. to 23l. 15s. is asked spot, but for arrival 22l. to 22l. 5s. c.i.f. would buy. *Cochin* oil is selected at 27l. to 27l. 5s. on the spot, and 25l. 10s. forward. *Mauritius* nominal at 25l.

OIL (COD-LIVER) remains firmer, and last week's quotation

still holds good, although slightly lower prices have in some instances been accepted. But there is very little business doing, both sides preferring to wait. The Finnmarken fishing is still proceeding, but has only yielded some 400 barrels oil so far, against about eight times that quantity last year.

OILS (ESSENTIAL).—*Star anise* remains quiet at 6s per lb. nominally, but 5s. 11d. would buy, no doubt. *Cassia* neglected at 2s. 11d. to 3s. per lb. *Citronella* neglected at $\frac{1}{2}$ d. to $\frac{1}{10}$ d. per oz. for native oil. The exports from Ceylon have shown a slight falling off lately, the figures from October 1 to April 19 being: 1887-8, 4,871,746 oz.; 1886-7, 4,916,928 oz.; 1885-6, 4,444,593 oz. Of the present season's exports, 2,766,578 oz. have gone to the United Kingdom, 2,068,736 oz. to America, and the rest to Australia, India, &c. *Cinnamon oil*, quiet at the previous quotations. The exports from Ceylon in the periods between October 1 and April 19 have been, 1887-8, 47,207 oz.; 1886-7, 43,447 oz.; 1885-6, 82,159 oz. This includes a large proportion of common grades and leaf oil. *Lemon* is reported by some agents to be dearer in Italy. *Lavender* very firm, and by no means plentiful. *Otto of rose* firm at unchanged prices. The new crop, so far as it is possible to say anything now, promises well. *Peppermint* steady, 10s. 9d. per lb. asked for American HGH.

OIL (OLIVE).—There is nothing new to report as regards our market. *Mogadore* oil, which is still in rather small supply, remains quoted at 33l., *Sicilian* at 34l., and *Spanish* nominally at 37l. In Liverpool only a small business is doing, mostly in inferior and medium oils. As regards the producing countries, in Spain excellent prospects are reported for the new crop, but no reduction has taken place in the high prices required for available oil, and Spain is in consequence now rather an importing than an exporting market. From Morocco no oils are at present being shipped to the United Kingdom, and in Tunis prices are generally too high to admit of export to this country. As regards Greece and the Levant, in Corfu the olive-trees are blossoming exceptionally well, but the weather is dry and hot. In Candia the prospects of the growing crop are very favourable, but there is not much old oil left in stock. In Naples the market is rather neglected. New Gioja oils have arrived on the market in large quantities, but find a pretty good sale, and even for export to Spain purchases have been made. In Gallipoli quotations have fallen from the relatively high level which they maintained some time ago. The prospects of the coming crop in that district are excellent, but it is yet too early to form a definite opinion. In the Gioja district, after last year's crop, the bulk of which has only been gathered lately, no crop worth mentioning is to be expected.

OILS (VARIOUS).—The following are the current quotations for some of the principal oils:—*Cottonseed oil*, steady; crude spot, 18l. 12s. 6d.; refined, 20l. 15s. Hull crude, 17l. 7s. 6d., refined spot, 20l.; June-August, 20l. 15s.; November-April, 18l. 7s. 6d. to 18l. 10s. *Linseed oil*, firm; spot, according to position and packing, 18l. 12s. 6d. to 18l. 15s.; month, 18l. 15s. to 18l. 17s. 6d.; June-August, September-December, and January-April, 19l. 2s. 6d. to 19l. 5s.; Hull spot, 18l. 12s. 6d. to 18l. 15s.; month, 18l. 15s.; June-August, 19l.; September-December, 18l. 17s. 6d. to 19l.; January, 19l. 5s. *Palm oil* dull, at 21l. for fine Lagos. *Petroleum*, American spot, $5\frac{7}{16}$ d. to $5\frac{9}{16}$ d.; September-December, $5\frac{1}{2}$ d.; Russian spot, $5\frac{1}{2}$ d. to $5\frac{3}{4}$ d.; September-December, $5\frac{1}{4}$ d. *Rape oil*, brown spot, 23l.; June-August, 22l. 10s. to 22l. 15s.; September-December, 22l. 15s. *Turpentine* dearer: American spirit, spot and June-August, 30s. 3d.; September-December, 27s. per cwt.

OPIMUM.—In Smyrna prices have again given way a little, and the market, according to mail reports dated May 11, closed weak with business at the equivalent of 8s. 10d. per lb. c.i.f. for new *Karahissar* with visite, 7s. 6d. per lb. for old tale quale *Karahissar*, and 7s. 11d. per lb. for old tale quale *Yerli*. In the interior of Asia Minor the crop prospects remain excellent, and the following is a report from Salonica, dated May 8:—"So far not a week has passed without rain; in the country the weather could not possibly be more favourable, and the opium fields present a magnificent aspect. In some districts nearest to Salonica the plants have already commenced flowering, and in about a fortnight gathering will commence everywhere, and will continue until the second

half of June. The crop may now be said to be secure, and, unless continued rain during the harvesting reduces the yield, from 750 to 800 cases will be gathered. The first arrivals will take place about June 15."

POTASH SALTS.—*Bichromate* remains firm at $4\frac{1}{2}$ d. per lb. *Chlorate* a shade less steady, but $5\frac{1}{2}$ d. per lb. is still the nearest price. *Prussiate* remains quiet at $6\frac{3}{4}$ d. for foreign yellow, and at 1s. 7d. for red.

QUICKSILVER.—On Friday last the importers fixed 7l. 5s. as their price, and kept to that figure until to-day, when they lowered it to 7l. A considerable business, at generally firmer rates, has been done, mostly from second-hands, and the market closes firm.

QUININE SALTS.—Very little business has been done in *Quinine sulphates* since last week, and there have been sellers all along at 1s. 5d. per lb., and perhaps less would have been accepted, though some say that nothing could be bought at 1s. $4\frac{1}{2}$ d. per oz. Owing to the firmness of the raw material at the auctions the market closes with a better tendency, but 1s. 5d. per oz. would still be accepted for German bulk. A considerable quantity of *Cinchonidine* will be offered for sale at the next drug auctions.

SHELLAC closes firm and slightly dearer, 41s. 6d. per cwt. c.i.f. having been paid for standard *Second orange* TN, June-August shipment, and 32s. 6d. c.i.f. for *Garnet* lac AC near at hand.

SODA SALTS.—*Ash*, unchanged, at $1\frac{1}{8}$ d. per degree landed. *Bicarbonate* also steady, at 5l. 5s. per ton from the warehouse. *Caustic soda* is less firm, and holders have been offering more freely, although nominally cream is still quoted at 6l. 15s., and white 60 to 70 per cent. at 7l. to 7l. 5s. per ton. *Crystals* very firm and dearer since our last quotation; 46s. 6d. per cwt. must now be paid here ex ship, and 40s. per cwt. on the Tyne, while for June delivery 41s. would be paid. *Nitrate*, firmer again, at 9s. 6d. to 10s. 6d. per cwt. according to quality. The consumption of *Soda nitrate* in Europe during the first four months of this year has been about 100,000 tons in excess of that of previous corresponding periods, and it is expected that the position of stocks in Europe at the end of June will prove that the unprecedented shipments made during 1887 have been no more than sufficient for the requirements of the market. The shipments made from the West Coast to Europe since January 1 have been fully up to the average of previous years, and as there does not appear to be anything to discourage the producers, it is probable that during the next eight or nine months the shipments to Europe will be conducted on the same liberal scale as in 1887.

TEA.—The market scarcely opened after the holidays till Thursday, a little business only being done by private contract on Wednesday, when a few lines of N.S. 1888-9 Newmakes were placed on the market out of two cargoes just arrived. The quality is better than previous lots shown, and leaf is good, but, generally speaking, the liquor is not striking, and there have been as yet no really fine teas. On Thursday the usual Congou and green sale was held with between 5,000 and 6,000 boxes new Newmakes. Congous in half chests sold at about previous rates. Moning, $4\frac{1}{2}$ d. to $4\frac{3}{4}$ d. Kaisow and Saryune, $3\frac{3}{4}$ d. to 4d. Packing, 4d. to $4\frac{1}{4}$ d. Green teas selling flatly, the small demand existing being chiefly for export. The first steamer (the *Moyune*), containing New Monings, sailed from Hankow on May 20, and the *Glengyle* will follow shortly, the *Moyune* being due at the end of June, but buying by English buyers in Hankow has been very short, and telegrams state that before the *Moyune* could fill up freights had fallen to the very low figure of 2l. a ton for the first steamer. No news has yet arrived of the opening of the Kaisow market, but a few lots of New S. Capers may be looked for about June 11. The Assam and Ceylon market has been practically closed, one small sale having been held, and prices realised being about as before. It is, however, not unlikely that next week's sales may see rather firmer rates, as the cessation of sales for nearly a fortnight must tend to strengthen the market after the un-naturally sudden collapse of the last month.

WAX (JAPAN).—An advance is reported to have taken place in the East, but our market has not responded to any extent. The latest seller's quotation for good pale squares was 49s. to 50s. per cwt.

THE AMERICAN MARKETS.

NEW YORK, May 11.

THE condition of this market has continued almost unchanged from the date of last report until within the present week, during which a firmer feeling has prevailed in a few articles and a better tone has been created in the market generally. But no speculative disposition, only a regular consumptive demand may be looked for, as the agitation of the tariff reduction entirely precludes the former; besides this is the year of the Presidential election, and during such periods business is always more or less neglected for matters political.

The prices sterling (in parentheses) are what the different articles would cost delivered in London, all market allowances, discounts, &c., being taken into account. Importers can therefore see at a glance the course of this market compared with their own.

ACID (CITRIC) continues in good demand, and the American manufacturers are still very short, while they have until recently been taking orders for June delivery at 50c. (2s. 1d.), and only at present delivering on contracts previously made. Any acid wanted for present use by those having no contracts must be obtained in the open market, and 54c. (2s. 3d.) is asked for such lots (10c. duty) for either American or foreign, while there is every evidence of higher prices prevailing for the season, which is just at hand. It is doubtful whether our home manufacturers can supply the demand for that season, and thereby keep the price down, or rather keep out the foreign stuff, for that is their real object.

ALOES.—*Cape*, 5c. (2½d. per lb.); *Socotrine*, 20c. to 40c. (10d. to 1s. 8d.), according to quality and dryness; *Barbadoes*, 18c. to 20c. (9d. to 10d.) per lb.; and *Curaçao*, 4c. (2d.).

BALSAM FIR.—*Canadian* still keeps high, at \$3 per gallon, (12s. 6d.); and *Oregon*, a similar product of American origin, at \$1.10 (4s. 7d.) per gallon.

BALSAMS.—*Peruvian*, \$1.10 (4s. 7d.) per lb. in iron cans of 20 lbs. to 100 lbs. each net; *Copaiba*, 50c. to 60c. per lb. (2s. 1d. to 2s. 6d.), in good supply and fair demand.

BALSAM TOLU, 30c. (1s. 3d.) for bright, clean and transparent.

BROMIDE OF POTASSIUM, no change, at 33c. (1s. 4½d.) per lb. in lots of 1,000 lbs. and upwards.

BUCHU.—Short prime green leaves 6½c. (3¼d.), and 18c. (9d.) for good green long.

CANTHARIDES.—*Chinese*, 45c. (1s. 10½d.), and prime *Russian*, \$1.40 (5s. 10d.) per lb.

CARDAMOMS.—*Mangalore*, 65c. to 90c. (2s. 9½d. to 3s. 9d.) per lb.; *Malabars*, 60c. to 80c. (2s. 6d. to 3s. 4d.); and *Aleppy*, 40c. to 60c. (1s. 8d. to 2s. 6d.).

CUBEBS.—Prime true stemless sifted, \$1.45 (6s.) per lb. and ordinary stemmy unsifted, \$1.25 (5s. 2½d.). Some lots of spurious berries have again recently been rejected here by the Customs; several instances of rejections of such goods have occurred here of late, as the appraisers are extremely careful not to permit any but genuine cubebs to be brought into the country.

GOLDEN SEAL ROOT, which had attained an unusually high figure, has declined somewhat, being more freely offered and obtainable at 70c. (2s. 11d.), which is still much above its usual price.

GLYCERINE has declined lately about 1½c. per lb. and C. P. white is selling at 18½c. (9½d.) in drums, inclusive, barrels being quoted at the same price, in lots of not less than 1,000 lbs., and cans at 19c. (9½d.), packages included, in 500 lb. lots.

INSECT POWDER.—The demand is considerable and steady, the height of the season having now arrived. The price is firm at 50c. (2s. 1d.) for reliable brands of either domestic or foreign grinding.

OIL OF PEPPERMINT is steady at previous prices: Western, \$1.75 in tins (7s. 3½d.); New York State, known as Wayne Co. \$2 (8s. 4d.); H. G. H., in bottles, \$2.35 (9s. 9½d.).

OIL OF WINTERGREEN has resumed about the nominal figure at which it stood prior to the blizzard and subsequent scarcity. It is now in good supply, and selling at \$1.75 (7s. 3½d.).

OPIUM remains about the same as last reported, at 3, equivalent to \$2 without duty (8s. 4d.) for single cases, and in lots of 5 or 10 cases 12½c., or about 6½d., less would be, although for a few days a little more firmness was created by cable advices of an advance abroad, and the larger holders were not disposed to accept less than what had been asked for single cases just previously. There was, however, no weak party who would still accept former prices, and this has had the effect of preventing any renewed firmness in the article.

QUICKSILVER is decidedly lower, and offering at 50c to 52c. (2s. 1d. to 2s. 2d.), according to quality.

QUININE (FOREIGN).—This rise took place immediately upon the receipt of advices from abroad of increased price of 20 per cent. at the London bark sales; holders here advanced their prices to 35 and 36 cents (1s. 5½d. to 1s. 6d.), while the American manufacturers had but a few days before (the best of the month) reduced their price 3c. per oz. (1½d.) to the present figure of 50c. (2s. 1d.).

SAFFRON (AMERICAN) still remains at 14c. (7d.).

SENEGA, 42c. to 45c. (1s. 9d. to 1s. 10½d.), according to quality.

TONQUIN BEANS.—*Pará* have advanced to 45c. (1s. 10½d.).

THE ACCLIMATISATION OF DRUGS IN CEYLON

THE report of the Director of the Royal Botanic Gardens in Ceylon contains several references to the efforts which are being made for the propagation of exotic medicinal plants in the gardens, from which we select the following—

CINCHONA.—Much of the bark shipped from the island in 1887 can barely have paid the expense of production, and it may be confidently expected that the export from Ceylon will now rapidly fall. The history of this industry in Ceylon has fully shown the truth of what was so strongly insisted upon from the first by those who looked ahead, that quality, not quantity, was the object to be aimed at by the grower. This more far-seeing policy has been followed in Java, and we may now soon expect to see large supplies of rich bark coming from that country. Some seed of *Remjia pedunculata*, one of the "Cuprea" barks, was received from Kew in April, 1887, but none of it is sown.

COCA.—Our numerous old bushes in the *Pérádeniya* Garden yielded this year a large crop of seed, which was advertised for sale, and some 25,000 seeds disposed of to over a hundred purchasers. As this seems to show some renewal of interest in the plant, a few further notes upon it may be here given. The plant was originally received in 1870 from Kew, and all the plants now in the colony have been derived from the *Pérádeniya* stock. This matter of origin is important, as more than one variety is in cultivation. Mr. Thiselton Dyer states that there is some doubt as to the source of the Kew plant, but it is thought likely that it may have been obtained from M. Triana, the well-known South American botanist, in which case it was collected in New Grenada and not in Peru or Bolivia. The specimens in the Kew herbarium, collected on the Rio Magdalena, are precisely like the cultivated plant at Kew. So long back in 1876 it was obvious that it differed somewhat in the form of its leaves from the typical *E. coca*, and a figure was added of the usual pointed form of leaf for comparison. It is probable that several forms are cultivated in South America and perhaps some may be richer in alkaloid than others. Two varieties are now being grown in Java, and one of them has yielded on analysis a percentage of 0.87 per cent. cocaine, which is considerably higher than that of the sample sent home from the *Pérádeniya* Garden. There are now being sent home for analysis some other more carefully prepared samples of the Ceylon variety. The existence of different varieties of this species may probably explain the fact that though a mountain plant in the Andes, it is not found to grow in our higher elevations. Experience in Ceylon shows that it does well only at levels below about 2,500 feet, and that as a rule some shade is necessary.

CUBEBS.—The high price at which this drug has been lately selling in the home market has led to several inquiries as to the possibility of its cultivation in Ceylon and the means to obtain plants. The cultivation of cubebs as a commercial pursuit appears to be carried on at present only

in certain parts of Java and Sumatra, where the business is almost entirely in the hands of the natives. No details are known of the mode of cultivation, which, however, seems to be merely that of ordinary pepper, the stems being allowed to climb over the trunks of trees, and the fruits plucked before they are quite ripe, and carefully dried. There is no reason to doubt that it could be easily carried on in the moist low-country of Ceylon, and it is perhaps remarkable that it has not been practised by our native population who grow other kinds of pepper so largely. It is, however, by no means easy to obtain the true *P. cubeba*, which is a plant very little known, and indeed imperfectly understood even by botanists. Several other species approach it very closely, and even at Kew the cultivated plant, hitherto believed to be *P. cubeba*, has since been determined to be another species; and there is nothing now there to represent the cubeb plant. The botany of the subject is still greatly involved, and in trade also numerous spurious and false cubeb are met with, the fruits of allied species. One of the difficulties in the way of commencing the cultivation of cubeb is due to the plant being dioecious, with the male and female flowers borne on different plants. On several occasions I have succeeded in getting plants for the Gardens, and at present I have some fifteen young plants at Henaratgoda, obtained by propagating from a single one from Singapore. Unhappily, on flowering this proved to be a male, as has been the case with each of the other plants I have been able at different times to obtain. Either sex is, of course, useless alone, and I am now attempting to get ripe seed from Java, but it appears to be difficult to obtain this from the natives.

GAMBIER.—This is another great cultivation at Singapore, and, like pepper, is mainly in the hands of the Chinese. Between 25,000 and 30,000 tons of this tanning material are annually exported thence, much of it of a very inferior quality. It has been found most difficult to obtain living specimens of the plant (*Uncaria gambier*) from which this extract is prepared. Seed appears very difficult to get, as the climbing stems are all cut before flowering, but in March over 200 cuttings in Wardian cases were received. Of these, one sickly specimen only survives.

IPECACUANHA.—This very valuable drug has been in cultivation here for many years. The gardens first received it in 1848 from Kew, and additional consignments from the same source were obtained in 1866 and 1871. Many remarks on its cultivation will be found in Dr. Thwaites' reports from 1872 to 1878. So long as it was grown in the Péradeniya Garden very little satisfactory growth could be obtained, and the plants remained very small, but in the Henaratgoda Garden the results have been somewhat better. Still not much progress, so far as the production of the roots themselves went, could be reported. During the past year (1887), however, as a result of more care in the preparation of the soil and choice of situation for the beds, some roots of much finer growth have been produced, and there is no occasion to despair even yet of producing a good sample of this important medicine. The plant is propagated with extreme facility by division of its roots, but from its small size and very slow growth it must always be the subject rather of garden than estate cultivation. Mr. Cantley saw in Johore thousands of plants in excellent health grown in rich vegetable soil with wood ashes, and well protected from the sun and wind by palm leaves. By order of the Madras Government a plantation is about to be formed in the teak plantation at Nilambur, on the Malabar coast.

PEPPER.—The *Piper nigrum* plants received from Singapore two years ago are now making good growth, and appear to be of a more vigorous and better variety than any of the native ones so much grown for local sale. It is remarkable that the cultivation of this product on a large scale for export has never been seriously taken up in Ceylon.

TEA.—The success of tea-growing in Ceylon is leading many other countries to attempt its cultivation, and we have lately sent a supply of seed to New Zealand, where the experiment is being conducted by the Chief Conservator of Forests, on both the east and west coasts of the Northern Island. The plant is doubtless capable of culture under a very wide range of climatic conditions, but the success of tea-cultivation anywhere as a commercial speculation depends entirely on the cost of production, and mainly on the rate of wages for labour.

INDIAN CINCHONA STATISTICS.

THE Statistical Bureau of the Treasury Department at Washington has collated the following information regarding the extent and yield of the cinchona plantations in British India. The figures have been supplied by the United States consuls:—

Bengal Plantations.

Year ending March 31	Under Cultivation Acres	Permanently Planted Plants	Yield in lbs.
1882	199	325,103	25,000
1883	331	614,235	24,000*
1884	680	1,118,773	4,800†
1885	963	1,703,184	— ‡
1886	1,200	1,813,740	18,103‡

Mysore Plantations.

Year ending March 31	Under Cultivation Acres	Permanently Planted Plants	Yield in lbs.
1882	15	12,125	1,334
1883	23	22,949	3,661
1884	23	22,949	3,472
1885	23	22,949	3,472
1886	325¶	143,279¶	11,434¶

Coorg Plantations.

Year ending March 31	Under Cultivation Acres	Permanently Planted Plants	Yield in lbs.
1882	771||	617,156	— †
1883	1,086||	863,725	— ‡
1884	1,868||	1,494,385	— ‡
1885	2,012||	1,610,199	— ‡
1886	1,800||	1,440,152	7,950

Nilgiri (Madras) Plantations.

Year ending March 31	Under Cultivation Acres	Permanently Planted Plants	Yield in lbs.
1885	3,976**	8,245,722**	243,300
1886	3,878**	6,871,876**	230,992

Statement showing the out-turn and disposal of cinchona bark at the Government plantations in India during each of the years ending March 31, from 1882 to 1886:—

Thandowngyee Plantation (Burma).

	1882	1883	1884	1885	1886
	lbs.	lbs.	lbs.	lbs.	lbs.
Bark collected	323	507	—	—	—

Nilgiri Plantations.

	1882	1883	1884	1885	1886
	lbs.	lbs.	lbs.	lbs.	lbs.
Balance in store April 1	6,997	5,304	2,837	92,526	125,663
Collected during year	242,052	129,713	183,765	116,017	113,366
Total	249,049	135,017	186,652	208,543	239,029
Exported to England	232,467	62,518	30,510	—	—
Issued to quinologist, medical departments, and private individuals	11,278	69,612	63,616	82,880	113,940
Total	243,745	132,130	94,123	82,880	113,940
Balance in store March 31	5,304	2,887	92,526	125,663	125,089

Sikkim Plantations.

	1882	1883	1884	1885	1886
	lbs.	lbs.	lbs.	lbs.	lbs.
Balance in store April 1	217,802	198,888	163,808	149,548	209,723
Bark collected	341,570	396,980	306,160	339,201	205,410
Total	619,372	595,868	469,968	488,749	415,133
Sold locally to medical department	804	500	100	1,266	100
Issued to quinologist for manufacture of febrifuge	347,200	389,760	320,320	277,760	159,640
Sent to London for sale	72,480	41,800	—	—	—
Total	420,484	432,060	320,420	279,026	159,740
Balance in store March 31	198,888	163,808	149,548	209,723	255,393

* Product of 316,435 plants only, the remainder being young plants.
 † Product of 205,547 plants only, the remainder being young plants.
 ‡ No information available.
 § Yield of two plantations out of four.
 ¶ Three hundred and three acres were newly brought under cultivation in the Kadir district. The number of plants thereon is 120,330, which, being young, yielded no out-turn during the year.
 || Calculated at 800 plants to the acre.
 ** These totals represent only the reported figures. The collector of the district states that the unreported area is probably quite as large.



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish.

Write on one side of the paper only; write early; and devote a separate sheet of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulae consult the last volume, if you have it.

Send queries, etc., not noticed in this issue will, if possible, be attended to next week.

The Popularity of Strophanthus.

SIR.—There is one statement in Mr. A. Stark's admirable *Burroughs-Walpole's* prize essay to which we take exception until the writer furnishes details in support of it. He says, speaking of strophanthus, "As a rival to digitalis, its popularity is decidedly on the wane." So far from this being the case, our experience is that strophanthus is still, and very decidedly, on the wax. Within the last four weeks we have sold two hundred pounds of the seeds in different small parcels, and could easily have doubled these transactions had our views of value not been a few pence higher than the buyers'. This quantity is exclusive of tincture.

In reference to another remark of Mr. Stark's, we may say that strophanthin (would not "hispidin" be a better name?) has become an article of commerce since his paper was written.

Yours faithfully,

Galen Works, Deptford, May 23. JOHN MOSS & Co.

Carriage of Medicines Free by West-end Firms.

SIR.—I had a prescription brought to me to dispense this week by a gentleman from London who had it dispensed there, and in the envelope was a printed postcard containing forms for filling up when ordering medicines, and an intimation that medicines were sent carriage free and no charge made for boxes or packing.

Now I would advise my provincial brethren, in order to meet this competition, to ask their customers whether these firms allow the price of the carriage, boxes, and packing when they wait to have their medicines made up and take them with them, and explain to their customers that they must make a pretty good profit if they do not, and offer to make them up less what the carriage, &c., would come to; they can easily compete with these firms in that way, as they have not such heavy expenses.

I may say that I was myself partly instrumental in introducing the system when engaged in a large West-end firm, but we only did it in self-defence, because others did it.

Yours faithfully,

J. E. BYDNE.

Holiday Experiences.

SIR.—Your indubious correspondent "Heder" always strikes me as a remarkable compound of pharmaceutical humanity. He must be a real live *made man*. Ask what question you like, and "Heder" is invariably to the front with an answer, correct or incorrect. Some of his recipes are "dearfully and wonderfully" put together. Pray, sir, who is this remarkable being? Why does he continue to hide his light under a bushel? His latest communication is on "Holiday Experiences." Tastes certainly differ. When I take my walk abroad I give "shop" a wide berth. "Heder," on the contrary, looks up his erring brethren, and with his profound wisdom and vast experience gathers materials for a sermon, and sends that sermon to you, sir, for the instruction and edification of lesser lights. Methinks that "Heder" might often give more heed to his own

ways and let other people heed theirs. I am sorry for the chemist who has nothing else to do but clean and gish his shop bottles, and we are not all so blessed with the needful as to be constantly sending to Maw's for the neatest style of shop round or elaborately fitted drawers. If "Heder" had to spend a few market days in a businesslike mine, where dispensing and ordinary retail are being carried on on the one side, and horse-powders, sheep-dipping, job, fly-powder, and tannin seeds are being actively packed and sent out on the other, his superfluous thoughts and interesting "Holiday Experiences" would probably receive a nice shock.

Leominster, May 21.

M. J. ELLWOOD.

The Medicine Stamp Act.

SIR.—The reply of the Chancellor of the Exchequer to the question of Dr. Sargharson, given in your journal of May 19, exhibits in a marked degree the apathetic character of the retail chemists and druggists of the United Kingdom and the great want of unanimity in questions affecting their commercial prosperity.

The Chancellor was no doubt correct when he said that "the trade journals have on more than one occasion expressed an opinion that these duties are administered in a considerate manner." When we remember the heavy penalties attaching to an infringement of the provision of the Act and the comprehensive wording of its various sections, coupled with the difficulty of correctly interpreting its meaning, it is certainly "considerate" on the part of those who are engaged to see that its provisions are strictly carried out to administer it as it has been for me time; but the question of most importance to us as tradesmen is, Why should such an Act exist? There is no other tradesman so hemmed in by Acts of various kinds as the unfortunate but patient disciple of Esculapian. The deist informs you that "artificial teeth improve mastication and cure indigestion," and yet we do not find that he has got a stamp upon his manufactures. The soap-maker tells you that his antiseptic soap is "all healing in skin diseases," or "prevents all scaly or other eruptions of the skin," and yet it is not necessary for these preparations to be sold under the same restrictions as a "powder," prepared according to a Pharmacopoeia, which is said to be "effectual" as a laxative. Surely the time has arrived when these anomalies should be swept away.

There is another and equally important reason why the penal clauses of this Act should be repealed. Occasionally, when there is a fear of an epidemic spreading, some medical journal or the Board of Trade will give directions for the preparation of a medicine to be kept in readiness and to be administered at the first indication of illness. Very few of the public take the precaution to keep such recipes by them, and if the retail chemist prepares the medicine, if he sees the use it is intended for, he is in danger of coming under this Act.

It seems to me, therefore, that a memorial setting forth our grievances should be drawn up, and copies sent to all parts of the United Kingdom for the signature of every registered chemist and druggist, and then forwarded to the Chancellor of the Exchequer, either through the various members of Parliament or by a Deputation of representatives from most of the large towns, asking him to repeal this and objectionable Act.

Yours respectfully,

PENALTY. (6011)

[Many of the apparent "anomalies" of the administration will be cleared up in the important treatise on the Medicine Stamp Act, by Mr. Alpe, of the Solicitor's Department of the Board of Inland Revenue, which will shortly be published.]

A correspondent in the North of England, who has lately been penalised by the Board of Inland Revenue, gives us names and addresses of two persons in London who obtained from him the articles for the sale of which he has been called upon to pay. It would be of interest to ascertain whether these persons are doing the business on a large scale as common informers or whether they are simply in the service of the Board. Perhaps some other victims who

we had orders from unknown correspondents in London will kindly give us the names of the persons who have supplied them.

Oxfordshire Linseed Poultice.

SIR,—Mr. A. Laitram, in dating his letter on the above subject from Oxford, would lead one to suppose his peculiar experience of linseed poultices arose in that city, but his insinuation to "the local doctor" rather contradicts that assumption. A native of Somersetshire, who, by the way, was never in Somerset, informs me that in remote parts of the county where linseed is grown it is a common practice to use the whole seed for poultices when the crushed cannot conveniently be obtained. The general use of the whole seed as a matter of choice is quite a different thing, and is possibly simply an instance of local prejudice.

Yours faithfully,

East Finchley, London, N.

C. E. SAUNDERS.

Liniment of Turpentine.

SIR.—Seeing that the liniment terebinth trouble is continually exercising your correspondents, I am very pleased to be able to endorse your remarks *re* Mr. Perry's suggestion, contained in THE CHEMIST AND DRUGGIST of April 30, 87. I have been using it since then, and find it makes a perfect creamy liniment that keeps its condition admirably, and is not the slightest trouble to prepare.

I feel quite grateful to Mr. Perry for the hint.
Central Dispensary, I am, dear sir, yours, &c.,
Adelaide, South Australia, H. ANSON.
April 10, 1888.

Tincture of Myrrh and Borax.

SIR.—Your correspondent, Mr. J. E. Ryder, does not tell whether the eau de Cologne is English or German. I send my own form, which has stood the test of years:—

Myrrh	3 oz.
Rhatany	2 "
Borax	2 "
Honey	2 "
Glycerine	2 "
Water	15 "
British eau de Cologne to	3 pints

M. S. A.

Yours truly,
HEDER. (60, 21.)

Professor Attfield's Ancestors.

And *propos* of the new medicine to cure sea-sickness, it is perhaps generally known that King John gave several lands at Kepperton and Atterton, in Kent, to Solomon Attfield (his descendants can be interviewed by enterprising gentlemen). Their forefathers held lands on the condition that as often as the king should be pleased to cross the Straits of Dover, the said Solomon, or his heirs, should be obliged to go with him, to hold his Majesty's head."

We found the above paragraph in the *Court Journal* of last week, and, taking advantage of the permission so generously given by the scribbler who had put it together, I wrote to the well-known professor at Bloomsbury to ask some further particulars concerning the late lamented person or for a repudiation of the relationship. In reply, Professor Attfield sends us the following characteristic style:—

SIR.—I cannot throw light on the allusions in the excerpt have forwarded. It comes, I see, from the *Court Journal*, hence a joke is out of the question. I do not know of any ancestor of mine ever lived in Kent, and I have never even heard of such places as Kepperton or Atterton in that county. A document I possess, thanks to an old friend, shows that a John Attefeld flourished in the village of Ham Southall, in Hertfordshire, in 1368. And, as the late Ham Southall was kind enough to prove to me, in 1327 a John Atte Felde, of Edgbaston, was taxed to the amount of one shilling, being one-twentieth of his movables, as his share of a subsidy for the defence of our kingdom against

the Scotch. There is nothing occult either in the spelling or, for that matter, in the origin of the name. When Christian names no longer sufficed, our real English forefathers distinguished those who bore the same name by their surroundings or by other peculiarities. Thus we got John-At-the-water, now John Atwater, John-At-the-felde, and so on. The latter name would become altered to Attefelde, Attefeld, Attfield, and, more recently, Atfield. It would be quite as interesting to me as to *Court Journal* readers to know that 120 years or so earlier than 1327 an Attefeld was chosen to ease the sufferings of King John in His Majesty's forced labours to feed the Channel fishes. It is not everybody who can boast of being the descendant, or at least the namesake, of one who could deftly hold a king's head at the awful moment of sea-sickness. The Attefeld, Attfield, or Atfield coat-of-arms, according to Burke's "General Armory," includes two frisky open-mouthed dolphins. I never could tell why, but I now begin to see the justification. It would be odd if it should turn out that King John's head and those of my family's big-nosed and open-jawed Channel dolphins are connected by one tale. I also perceive a possible reason for there having been so many Johns in our comparatively small family since the time of our patron king. I had no idea that we ever had a Solomon amongst us until I read your cutting from the *Court Journal*; but I am not sorry, for the name is suggestive of wisdom, and points to a judicious and gentle admixture of race. [Not jew-dish-us and gentile, compositor, please—I hate puns.] Pray, sir, ask your readers to aid you, and me, in clearing up the allusions to which you refer. There really would seem to have been quite an art—a lost art, I fear—in holding another man's head properly at a time when one is so apt to lose one's own altogether. Seriously, though not keen on such matters, I should be glad of any private contribution to our pre-nineteenth century family history.

Yours faithfully,

Ashlands, Watford, Herts, JOHN ATTFIELD.
May 24.

The Grub (!) of Toothache.

SIR.—Most pharmacists have at some time or another sold "a penn'orth of henbane seeds" for the cure of toothache; many must know the method of effecting the cure, but few there are who believe in the wonderful properties ascribed to *Hyoscyami semina*. Their scepticism is mostly the result of their scientific training, not of any *à posteriori* chain of reasoning. Hence it is, perhaps, that so little has been done in the direction of bottoming this fallacy. When in Lincolnshire during the autumn of last year, I was much impressed by the faith shown in henbane seed as a charmer of the toothache-grub by people of sense and ability. One described to me how he was once a sceptic, but resolved to try the experiment for himself, and having tried it, found the grubs floating in the water; thinking that even this might be an ocular delusion, he strained the water through a white cloth, and there on the cloth were unmistakably the much-maligned organisms, with a distinct white body and black head. This concrete example there was no resisting; the only thing to do now was to try the experiment and examine the animals. The following I was told was the correct method of procedure: Place the seeds on some hot cinders on a shovel, and when they begin to crackle, invert a bowl over the burning mass; as soon as combustion is over, remove the bowl, fill with hot water and hold over it the open mouth so that the rising steam may enter freely. In about ten minutes examine the water, in the bowl for grubs. This method, I was told, had been adopted with great pecuniary success by an old woman in the district, to whom people came for miles round. She always allayed their scepticism—if, indeed, they had any—by showing the offending organisms to the patient, who could not conscientiously feel any pangs after having seen them.

I performed the experiment, observing all the necessary injunctions for its success, and—found the grubs! There they were; there could be no mistake this time—little white worms with black heads. My believing friends were delighted, and *à priori* reasoning seemed doomed to destruction by the inductive methods of a Lincolnshire quack. But the sceptic element refused to be so overridden, and I inquired if there was a microscope about the place. Fortunately there was—a cheap instrument, but, under the

circumstances, quite a godsend, and I set to work with a heavy heart. Soon a cellular structure was made out, and, on squeezing, a mass of granules, but no organisation that would suggest the presence of an animal. The black head was opaque and structureless. No motion could be detected in any part of the organism. Somewhat puzzled, I repeated the experiment, but this time left out the most important element—in fact, did not bring my mouth over the bowl. The grubs were there as before. Evidently then they were not furnished by the teeth. A more careful examination of them was then made, and they turned out to be nothing more nor less than the embryos of *hyoscyamus*, which had been projected from the heated albumen of the seeds owing to its expanding at a greater rate than the testa, and had lodged in the upper reaches of the bowl only to be dislodged by the water poured into it. The black heads were simply the charred ends of the embryos.

I was much surprised, not to say amused, to find that so eminent an authority as Mr. Jabez Hogg had gone out of his way to try and show that the "grub of toothache" was the embryo of an entozoon and to account for its presence by charging the host with eating tainted meat. Either the mounted slide he had sent to him was not the genuine article, or he has fallen into a most serious error. In any case if he performs a "blank experiment" he will find no need to call in the help of the trematoda to account for the appearance of this remarkable "worm" under the circumstances noted. Sheffield. G. A. GRIERSON.

Corner for Students.—We have received several letters from correspondents in Nottingham directing our attention to the fact that the gentleman to whom the first prize was awarded last week is not engaged in a chemist's shop, but is, as we understand, occupied solely in laboratory and analytical work in the university. The letters we have received do not appear to be written for publication, though we do not see why the subject should not be ventilated. We may, at any rate, state our view. The "Corner for Students" is primarily intended for advanced students who are either subscribers to this journal or in the employment of such subscribers. We have never laid down any restrictions as to age, experience, or immediate occupation, and several times the prizes have been taken by students during their college career (at Bloomsbury and elsewhere). Of course such competitors are hard rivals for shop apprentices; but our idea has never been that competitors have entered into these contests merely for the sake of what they could get out of them, and we have always found that the good taste of men who have advanced beyond the need of this stimulus has induced them to retire without any distinct rule being laid down that they should do so. If any of our Nottingham friends will try to frame regulations for the "Corner" at once sufficiently comprehensive and sufficiently exclusive, they will appreciate our difficulty.

DISPENSING NOTES.

The opinions of practical readers are invited on subjects discussed under this heading.

Dispensers who have compounded any of the following prescriptions, or similar ones, are requested to communicate their results to the Editor.

Aq. Flor. Aurant.

SIR,—Aq. flor. aurantii, q.s., being ordered in a mixture, is it customary to use the dilute or triple strength? On dispensing a prescription with the former, a customer complained that it was not so strong of orange-flowers as that which he had previously at Tunbridge Wells, by which I conclude the triple had been used. Yours truly, J. F. KINGZETT. Parade, Canterbury, May 15.

[We have seen both used. What is the custom of the trade? Post-card replies will oblige.]

Viscous Mixtures.

Ferri ammon. cit.	..	..	..	gr. 80
Syr. aurantii	..	..	..	3j.
Liq. arsen. hydrochler.	..	..	..	m48
Inf. cascariille ad	..	..	..	3vij.

M.

3ss. after meals, by measure.

This mixture, after standing ten days, becomes quite thick; why is this? HIBERNIA. (583)

[A suggestive article on combinations similar to this will be found in our twenty-ninth volume, page 16. As the above mixture contains no pectinuous ingredient the viscosity is doubtless due to the presence and action of some organism, the mycelia of which, ramifying through the mixture, impart the viscous appearance.]

An Explosive Mixture.

D. T. E. (60/5) has compounded the mixture mentioned by "Saccharine" three weeks ago, and as yet it shows no sign of bursting the bottle.

The Emulsion Query.

The following was submitted last week:—

Ol. jecoris	..	..	..	3iss.
Ferri ammon. cit.	..	..	..	5ij.
Glycerini	..	..	..	3j.
Aq. calcis ad	..	..	..	3iv.

Two teaspoonfuls three times a day.

Heder says:—"By working into the formula 2 drchms of powdered acacia and 5 grains tragacanth, an emulsion may be made—stable and palatable, but not palatable. I could not make a satisfactory mixture without the gum."

Mr. E. Jones, 52 Royal York Crescent, Clifton, says:—"After trying various methods, I found the following good mode of preparing the emulsion:—Mix the ol. jecoris with 3iss. gum acacia pulv., then add all at once 3iv. aq. calcis; rub together, and add gradually another 5ij. aq. calcis. Add to this the 3j. glycerin, shake together well in the bottle, and lastly add the ferri ammon. cit., previously dissolved in 3ss. of the aq. calcis, and make up to the required 3iv. with aq. calcis. The above I found went very well, and made a nice emulsion."

SIR,—In reply to the "Emulsion Query" in your issue of the 15th inst. the mixture cannot be dispensed as written. The ol. jecoris, if shaken first with the aq. calcis and then with the glycerin, forms an emulsion which is destroyed by the ferri ammon. cit.

The following modification of the formula gives good result:—Rub the ol. jecoris, 3iss, with 3ij. pulv. acacia, in a dry mortar; add 5vj. aque dest., and rub till an emulsion is formed. Add 3ij. more water, then, successive, the 3j. glycerin and liq. calcis sacch. m40. Add the whole to the ferri ammon. cit. 3ij., previously powdered in a dry mortar.

The mixture is still better if the lime be entirely omitted. Of course neither the addition of gum nor the omission of lime should be made without the sanction of the prescriber. Queen's Hospital, Birmingham. H. CAMPILL.

May 22.

Iodoform Ointment (57/41).

SIR,—Iodoform, 5ij, will not dissolve in vaseline, j; it should be very finely powdered and mixed in the cold. But in attempting to dissolve the iodoform "Gentian" would have used a water-bath, not a naked flame. H. CAMPILL.

In reply to "Gentian's" inquiry, Mr. H. Helbing, of the German Hospital, writes that heat should not be applied to any ointment containing iodoform. Heat nearly always decomposes iodoform, liberating iodine, more or less, according to the degree of heat applied. This decomposition is similar

that effected by light on iodoform ointments. The proper way to dispense the ointment ordered is to rub up finely powdered iodoform with the vaseline added gradually. The ointment should be of a bright yellow colour.

Heder expresses a similar opinion.

LEGAL QUERIES

52 60. *La'or*.—You will see how to proceed in opposing trade-mark by referring to page 260 of THE CHEMISTS' AND DRUGGISTS' DIARY, 1883. You had better first communicate with the applicants. Perhaps they will change their mark, or come to terms with you. You must enter notice of opposition within two months of the advertisement of the mark.

52 59. *T. G. R.*—The Pharmacy Act does not apply to the Channel Islands; but they have adopted most of its provisions in Guernsey.

52 58. *A. J. C.*—Certificate of having passed the British examination is not accepted in lieu of any similar examination in America. We have published a number of articles descriptive of the Minor examination, to which we must refer for "some idea" of it. You will find such narratives in monthly parts of this journal for June, July, and August, 5.

4 59. *Apprentice*—If your master deliberately refuses to fulfil his part of the contract with you, you can no doubt claim back the indentures cancelled, and possibly you may be entitled to damages. But it is not possible for us to say whether your grounds of complaint are trivial or serious. You had better get your parents or guardians to act for you in the matter if they think it necessary.

52 57. *Rhei*.—We do not make out from the papers and letters you send us whether you have any real grievance or not. The Pharmacy Acts, 1868 and 1869, gave the right of becoming eligible for the Modified examination to any person who should before December 31, 1869, produce to the Registrar certificates of having been actually engaged for a period of not less than three years in the dispensing and compounding of prescriptions as an assistant to a pharmaceutical chemist or chemist and druggist in Great Britain. Gather from your first letter that the Registrar refused to grant you this eligibility because at the time of the passing of the Act you were an assistant in Dublin. The questions are, were you, on July 31, 1868, of full age? Had you then been engaged at any previous time for not less than three years as assistant to a chemist and druggist in Great Britain? And, lastly, did you state all this to the Registrar before December 31, 1869? It is utterly useless to send petitions to the Council, telling them of your apprenticeship to your family. They have no power to make any concessions to you. The only questions of any practical importance are, what did you say to Mr. Bremridge, and what did he say to you in 1868 and 1869?

45. *X. Y. Z.* writes:—B. is a town in the Poor-law district of M., and with its surrounding parishes constitutes five districts, with a medical officer for each, and the dispensing is given, without tenders being given or called for, to the chemist there. Is it not the custom of Boards of Guardians to divide their favours equally between the chemists of the town, and should they not in common fairness be divided, it being understood that the patients suffer no inconvenience on account of distance?

They should say it is very unfair that a Board of Guardians should obtain all their drugs from one chemist, without giving others an opportunity of tendering. But their duty is to consider the ratepayers as well as the patients, and they should, therefore, buy all they want on the best possible terms. "X. Y. Z." should address them officially on the subject.]

57 64. *J. W.*—Any executor, administrator, or trustee of the estate of a deceased chemist and druggist may carry on the business of the chemist so long as he retains his capacity as executor, &c., and so long as a duly qualified assistant is employed to manage it. The executor may or may not be a relative of the deceased.

Prat Dumas.—Regarding the sale of boumiss, see our "Parliamentary News," April 14, page 473, and April 21, p. 508.

60 72. *B. H. A.*—The Lincoln Drug Company have registered the words "Blood Mixture" as a trade-mark. Mr. Annett (Beedzler & Co., Bishopsgate Street) has an action pending in which he applies for the removal of that mark from the register. The Lincoln people, on the other hand, are suing him for infringement; his defence is that his firm made blood mixture before they did. The proprietors of Clarke's Blood Mixture have also obtained injunctions against persons selling a "blood-purifying mixture," which they claimed to be a colourable infringement of their mark. But this contention has not been argued in any court of law. You ask whether you may call your preparation "Brown's Blood Purifying Mixture." You will see that if you do you may have to answer the firm alluded to, though if you were inclined to fight the question through we think you would win. See THE CHEMIST AND DRUGGIST, January 15, 1887.

60 46. *Nil Desperandum*.—We have not a distinct recollection of the manner in which the articles you name are put up, but if it is the case that the stamps are not properly and sufficiently pasted, stuck, fastened, or affixed to the packet, box, bottle, or other inclosure, so and in such manner as that such packet, &c., cannot be opened and the contents poured out or taken therefrom without so tearing the label that it cannot be made use of again, the person vending an article so defectively stamped, or a person receiving and keeping for retail sale even such articles, is liable to a penalty of 10*l.*

57 34. *Curboy*.—As the law stands at present the Preliminary examination may be passed before or during or after apprenticeship, or, indeed, irrespective of apprenticeship altogether; and the three years which a candidate for the Minor must have spent in the occupation of dispensing need not have been passed since the passing of the Preliminary.

MISCELLANEOUS INQUIRIES.

A large number of correspondents ask us for formulae which have already been published in this journal. It is not fair to more careful readers that we should frequently repeat such information, and so long as the back numbers containing the formulae or replies required are in print we must decline to do so. Back numbers of our weekly issue can be obtained from the publisher at 4*d.* each.

55 55. *Linimentum* puts this question:—"Will any of your readers tell me the reason for lin. camph. B.P. turning green when made by means of a water-bath?"

[Olive oil becomes green when heated. But why make liniment of camphor by the heat of a water-bath? It is a very bad practice.]

55 50. *Aspin*.—Sal Aeratus is another name for bicarbonate of potash.

53 15.—*Plumbum*.—A good application for the Tender Skin of Horses is a mixture of glycerine, 1 oz., and fuller's earth, 2 drachms, boiled together and used cold.

57 2. *Optics*.—The address of the Royal Blind Pension Society is 235 Southwark Bridge Road, S.E.

58/55.—*Mr. J. E. Ryder* writes to corroborate *A Country Chemist's* statement regarding the irritation caused by *Spermaceti Ointment*, and adds that he thinks "if the ointment is made without benzoin our correspondent will find it more satisfactory."

58/56. *Children's Powders*.—You only sent one powder (weighing about $1\frac{1}{2}$ grain), which was insufficient for both a qualitative and quantitative examination; but we should think that half a grain of calomel and one of sugar would be suitable proportions.

56/4. *R. Jeffrey & Son*.—We do not know any means for restoring the solubility of *White Shellac* which has become insoluble.

56/31. *F. G. C.* has not sent his name.

56/47. *Medical*.—We do not know the pamphlet which you refer to; perhaps you are thinking of the educational number of *THE CHEMIST AND DRUGGIST* (Sept. 17, 1887), which gives all information regarding medical examinations.

57/36. *G. G.*—You do not mention the kind of aniline dye for which you require a solvent. If it is the orange used for "hot-Tom," you will find either acetic or tartaric acid, in the proportion of 10 drops of the former and 5 grains of the latter to an ounce of water, quite suitable.

57/46. *J. H. W.*—Board of Health's Cholera Mixture.—Aromatic powder, 3 drachms; spt. of sal volatile, 3 drachms; tincture of catechu, 10 drachms; compound tincture of cardamoms, 6 drachms; tincture of opium, 1 drachm; chalk mixture to 1 pint. Dose, 1 oz. for an adult, $\frac{1}{2}$ oz. for a child of 12, and $\frac{1}{4}$ oz. for a child of 7 years, after each liquid motion.

57/62. *W. A. H.*—An ammoniated solution of nitrate of silver (30 grains to the oz.) first painted in the feather, followed by a little of a solution of pyrogallic acid (5 grains to the oz.) is the best dye for the feathers of pigeons. A weaker solution of the silver salt should be used for the wattle.

53/14. *Brunswick*.—Berlin Black is simply a superior Brunswick black made with a hard bitumen carefully freed from insoluble matter. We have recently given receipts for black enamel.

58/26. *Infusi*.—Concentrated Infusions.—The best way of making quassia on the small scale is by simple maceration of 8 drachms of quassia in 5 oz. of boiling water for two hours, and repeat with other 4 oz. of boiling water, so that 8 oz. of the infusion may be obtained. When cold add 2 oz. of rectified spirit. Compound gentian infusion may be made by the same method, using eight times the Pharmacopœial quantities of its active ingredients and 4 oz. of rectified spirit to the pint.

59/17. *Nemo* does not give us the formula of his *syrupus ferri lactophosphatis*. When he sends that he should also send some of the deposit.

R. H. P.—Dreesche's Iron is the *Liquor Ferri Albuminat*, so much used in Germany at present. It is made in the following manner:—Take 30 grammes of dried egg albumen (or five times that quantity of fresh albumen, which makes a clearer preparation) and place it in a mortar capable of holding a litre; rub the dried albumen to fine powder and add all at once 100 grammes of perchloride of iron dissolved in 100 grammes of water; stir constantly, as the albumen has a tendency to clot; and when the mixture is perfectly homogeneous add 60 c.c. of semi-normal soda solution, stir well so

as to complete the solution, and make it up to 500 grammes in weight. Now mix separately 330 grammes of cinnamon water and 170 grammes of 90 per cent. alcohol, and add this mixture to the alkaline fluid. The advantages of this preparation are its powerful hæmatinic properties; it is tasteless and non-astringent.

57/52. *Semper Eadem* would like to hear of anyone's experience as agent for a circulating library, if any chemist has filled such a position.

57/17. *B. A.* has not sent his name.

57/16. *Aqua*.—Meta-bisulphite of potash is a salt used in photography as a developer in place of sulphite of soda, it being more stable in solution.

58/17. *B. & S.*—Martindale gives the following formula for a *Solution of Carmine* to colour toilet preparation:—

Carmine	..	..	..	..	40 grains
Distilled water	..	..	..	q.s.	to moisten
Strong solution of ammonia	..	..	..	40 minims	

Dissolve and add
Distilled water, to 1 oz.

60/9. *Cedric*.—The tincture of cedar is made by digesting 2 oz. of cedar-wood shavings (the American cedar *Juniperus Virginiana*, is the best kind) in 1 pint of proof spirit.

60/45. *Desdichado*.—Chlorodyne is perhaps the best general cholera remedy to send abroad. See an article on "The Cholera in Spain," in *THE CHEMIST AND DRUGGIST*, February 15, 1886. See also answer to "J. H. W." (previous column).

Liparin.—We stated recently in reply to a correspondent that this article is supplied by the English agents (Messrs. Burgoyne & Co.) at 2s. 6d. per lb.; we should have said at 2s. 6d. per bottle.

C. S. Ashton.—We do not doubt that many other reasons besides those suggested may have quite properly influenced the decision.

60/16. *Kino*.—Beyond the general knowledge that Hoke's Solar Elixir is a preparation of chiretta, we do not know its composition.

56/42. *North Cotswold*.—Pepsin Wine.—It is inadvisable to macerate the whole of the stomach in the menstruum, as the peptic ferment is contained in the mucous lining. Two stomachs are sufficient for a pint of the wine; open these and wash slightly, then scrape off the mucous surface and macerate for two days in a mixture of hydrochloric acid, ʒj.; water, ʒv.; and glycerine, ʒij.; then add 12 oz. of sherry and 1 oz. rectified spirit; macerate for five or six days. Most of the wine can be poured off perfectly bright, and the rest may be filtered in the ordinary manner.

(2) *Cascara Sagrada Extract*.—Liquorice (liquid extract) effectually covers the taste of this medicine, when some aromatic, such as compound tincture of cardamoms or ginger, is added to it. We recently published a method suggested by Mr. Grazier, of San Francisco, consisting in treating the powdered bark with calcined magnesia and water, and then percolating with alcohol in the ordinary way. The magnesia is intended to saponify the resin, which is the source of the bitterness, and so render it insoluble in the alcohol. (3) Dogs poisoned with strychnine should get chloroform to inhale, or a good dose (say 30 grains) of chloral hydrate. Phosphorus paste is a poison which is difficult to convert. A mixture of olive oil (3 parts) and turpentine (1 part) administered freely is the best antidote. (4) The action of sodium sulphite is milder than that of sulphurous acid, and not injurious to the skin.

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„ PYROGALLIC	Bi-sublimed, white, bulky	Ditto ditto ditto.
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CELLOIDINE (Patent)	Gelatine plates... ..	Purest Pyroxylin; inexplusive.
CHLORAL HYDRATE	White cake and crystal	See Liebreich's, below.
CHLORAL HYDRATE (Liebreich's)	Transparent rhomboidals (facsimile of Dr. Liebreich's)	Will not decompose by age.
CROTON CHLORAL... ..	Shiny crystalline scales. (Powder form most objectionable)	Free from foreign chlorides.
GLYCERINE... ..	S.G. 1260, double distilled, brilliantly white, odourless; also lower S.G. and qualities	Free from lime, chlorides, metals; will stand severest chemical tests.
IODINE	R-sublimed, fine scales	Purest.
IODIFORM, Absolut.	Crystals and powder of soft touch... ..	Purest; made by electrolysis.
PARALDEHYD ... ..	... ..	Absolutely purest.
POTASS. BROMIDE	Fine white dry regular crystals	Perfectly free from iodide, and the most free from chloride.
„ PERMANGANATE	Large and small crystals	Chemically pure.
„ IODINE	Fine white dry regular crystals	Apply Barytic and other tests. This will never change colour.
SODA SALICYLATE, and other Salicylates	White powder and crystals	Freely soluble in water and alcohol.

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ERGOTINE, pure Dialysed ...	Brown colloid, purified by Dialysis	Free from all saline matter present in the ordinary Ergotine and extracts.
FERRUM OXYD. (5% Dialysed)	Transparent brown liquid, purified by Dialysis	Free from all saline matter. Diluted by ten times its weight of water, will stand the test of Nitrate of Silver.
PEPSIN PORCI (100%)	White, sweet, odourless powder	Freely soluble in water, not hygroscopic, and will not deteriorate; will dissolve by Wittstein's test) 100 parts of white of egg and 250 parts of fibrine.

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Dr. J. COLLIS BROWNE'S CHLORODYNE.

THE ORIGINAL AND ONLY GENUINE.

IMPORTANT CAUTIONS

From Lord Chancellor SELBORNE, Vice-Chancellor Sir W. PAGE WOOD and the LORDS JUSTICES OF APPEAL.

VICE-CHANCELLOR SIR W. PAGE WOOD, by whom the suit in Chancery was first heard, stated in his judgment that Dr. J. Collis Browne was undoubtedly the Inventor of Chlorodyne, that the whole story of the Defendant Freeman was a deliberate untruth as the falsehood he had deposed to with reference to the use of his Chlorodyne in the Hospital.

The VICE-CHANCELLOR also stated, 'that Chlorodyne was a fanciful name, and had application been made sooner, the Court would have given Dr. Browne protection.'

LORD CHANCELLOR SELBORNE coincided with the judgment of the Vice-Chancellor upon this point, and stated 'the application been made at a proper time and place, the Court would have found means to restrain the Defendant from misrepresenting the decision of the Vice-Chancellor.'

LORD JUSTICE JAMES, on appeal, stated in his judgment, 'that the Defendant Freeman had made a deliberate misrepresentation of the decision of Vice-Chancellor Wood.'

It was proved in Court, on affidavit by Mrs. Forbes, of Paris, that the testimonial published in the *Times*, November 14th, 1865, speaking of the great efficacy of Chlorodyne in Cholera, referred to Dr. J. Collis Browne's Chlorodyne, and that she never knew any other, that she had written to the Defendant Freeman to that effect; notwithstanding which notice the Defendant publishes the said testimonial as referring to his medicine.

The Editor of the *Medical Times*, in his report on Chlorodyne, January 13th, 1866, gives information that the Chlorodyne referred to was the medicine introduced by a retired Army Medical Officer, which was Dr. J. Collis Browne; still this is published by the Defendant as testimony to his medicine.

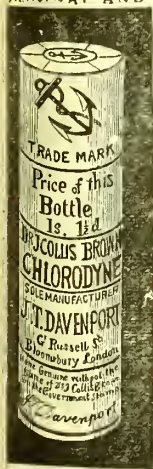
Numerous affidavits from eminent Physicians and others were produced in Court, stating that Dr. J. Collis Browne was the Inventor of Chlorodyne, and that when prescribing they mean no other.

The Defendant himself publishes that his compound is in effect and composition quite different to any other preparation, nevertheless he assumes the name, testimonials, &c., of Chlorodyne.

Technicalities in law prevent that protection which the public should justly have against such a course of conduct. It is now incumbent on all who purchase Chlorodyne to see that the name, 'Dr. J. Collis Browne's Chlorodyne,' is engraved on the Government Stamp, as it is not sold otherwise. All other compounds under the name of Chlorodyne are spurious. All attempts at analysis have failed; hence the statement that the constituents of Chlorodyne are known is a misrepresentation.

FURTHER IMPORTANT NOTICE.

The subjoined list of eminent Firms concur with Vice-Chancellor Sir W. Page Wood's statement in Court, that Dr. Collis Browne was undoubtedly the Inventor of Chlorodyne; and that when Chlorodyne or the Original Chlorodyne, is ordered, they invariably supply Dr. J. Collis Browne's:—



Apothecaries' Hall, London	Frazer & Green, Glasgow	Morson, T., & Son, London
Allen, Hanbury & Co., "	Gale & Co., London	Newbery & Sons, London
Baiss Brothers, "	Giles & Son, Clifton	Oldham, G., & Co., Dublin
Banks & Richards, Birmingham	Goulding, Messrs. Cork	Parsons & Richardson, Leicester
Barron, Harvey & Co., London	Gratton & Co., Belfast	Peake, Allen & Co., Dublin
Bell, John, & Co., "	Grimwade, Ridley, London	Raines & Co., York
Bourne & Taylor, "	Grindley & Son, Chester	Raines & Co., Edinburgh
Corbyn & Co., "	Hearon, Squire & Franols, London	Sang & Barker, "
Cox & Gould, "	Hodgkinson, Tonge & Stead, "	Sanger, J., & Sons, London
Curling & Co., "	Hopkins & Williams, "	Sim, James, & Co., Aberdeen
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Edwards, W., "	Mander, Weaver, Wolverhampton	Westwood & Hopkins, Lincoln
Evans, Gadd & Co., Exeter	Marsden & Sons, London	Woolley, James, Manchester
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EXTERNALLY: It has been used by Bouchut in cutaneous carcinoma. Rosbach for dissolving the false membranes of Diphtheria (see *Zeitsch. für Klin. Med.*, vi., H. 6), by Jacobi, of New York, for the same purpose, and recently Prof. Finkler himself has restored patency to an œsophagus occluded by carcinoma by the continuous administration of a solution.

PIL. PAPAIN (FINKLER).

For the convenience of dispensing PAPAIN (FINKLER) these pills are made up in bottles of 25, 50, and 100 (one and two grains each), in convenient shapes for carrying in the pocket.

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[HIGHEST AWARD.]

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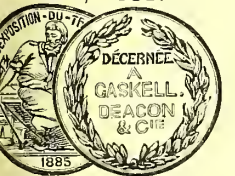


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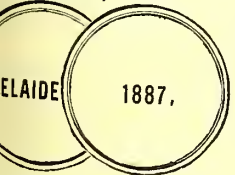
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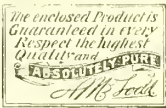
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It is the Greatest Medical Discovery of the present Century, and is regarded as a boon to mankind.

It is the best known remedy for Coughs, Colds, Consumption, Whooping Cough, Bronchitis, and Asthma.

It effectually checks and arrests those too often fatal Diseases—Diphtheria, Diabetes, Fever, Croup, Ague, &c.

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It effectually cuts short all attacks of Epilepsy, Hysteria, Palpitation, Convulsions, and Spasms.

It is the only Palliative in Rheumatism, Gout, Cancer, Toothache, Neuralgia, Sciatica, Lumbago, &c.

It rapidly relieves pain from whatever cause, allays the irritation of Fever, soothes and strengthens the system under exhaustive diseases, restores the deranged functions, stimulates healthy action of the secretions of the body, gives quiet and refreshing sleep, and marvellously prolongs life. It may be taken by old and young at all hours and times, according to the Directions.

It is extensively used by Medical Men in their official and private practice, at home and abroad, who have given numerous written testimonials of its wonderful efficacy.

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'It gives me great pleasure to bear testimony in favour of FREEMAN'S Chlorodyne. I have prescribed it extensively, and in cases of Asthma, Chronic Bronchitis, the last stage of Phthisis, and the Winter Cough of the aged, I have never found any substitute or chemical combination its equal.'

From J. DODD SWALLOW, M.D., M.R.C.S., Eng.; L.A.S.; *Medical Officer to the London City Missions, &c., &c.*

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'I have great pleasure in stating that I am constantly prescribing FREEMAN'S Chlorodyne. In Consumption and Asthma, as a Sedative; in Cancer, and in cases of Diarrhoea and Dysentery, I am daily witnessing its striking effects, and believe that the thanks of the profession are due to Mr. FREEMAN for his efforts to bring prominently before the profession so valuable and reliable a remedy as the Chlorodyne which bears his name.'

264 PETIT SAONNEX, GENEVA, SWITZERLAND, January 6, 1886.

DEAR SIR,—I send by same post £1 16s., or 46 francs, for 8 bottles, value 4s. 6d. each. Your Chlorodyne has been used in a case of Cancer, notorious at St. Leonards-on-Sea, where Dr. Penhall and Dr. Harvey attended, and the case was given up as incurable, for the leg ought to have been cut off, and the patient was too weak to stand operation. Now, Dr. Metcalfe said the same thing, and your Chlorodyne cured the person, which, indeed, is my servant, after six years being still alive and perfectly well. I think it is due to you, as the Inventor of the remedy, to state the fact, that others in similar circumstances may never despair as long as life is in the body. I authorise you to use my letter as you may think best, and also my name, to present people being humbugged by other rubbish, &c.

To Mr. RICHARD FREEMAN.

Yours truly,

WALTER SAVAGE LANDOR.

Sold by Chemists and Patent Medicine Dealers all over the world, in bottles, 1s. 1½d.; 2 oz., 2s. 9d.; 4 oz., 4s. 6d.; half-pints, 11s.; and pints, 20s. each; and by the Inventor, RICHARD FREEMAN, 70 Kennington Park Road, London, S.E.

Purchasers are cautioned not to have palmed upon them any substitute. See that the Trade Mark, "The Elephant," is on the wrapper, &c., and that the words Freeman's Original Chlorodyne are engraved on the Government Stamp, which is the only true Chlorodyne.

N.B.—Lord Chancellor Selborne, Lord Justice James, and Lord Justice Mellish decided in favour of Freeman's Original Chlorodyne, and against Brown and Davenport, compelling them to pay all costs in the suits. See *Times* of July 24, 1873.

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From Unopened Flowers, free from added colouring matter.

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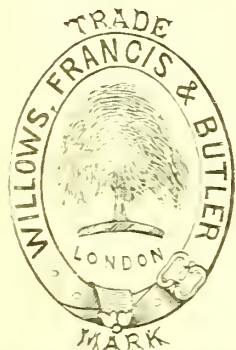
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In Boxes, at 1/6 and 2/6. 11/- and 21/- per dozen.

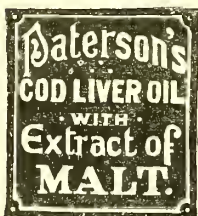
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2. ".....	" " 9/6	" " 15/	15. Cubeb, Copaiba, and Buchu ..	" " 15/6	" " 9/
3. ".....	" " 12/	" " 20/	16. Peruvian Mixture (stamped) ..	" " 15/6	" " 9/
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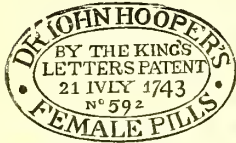
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Works:-WEST DRAYTON, MIDDLESEX. Telegraphic Address:-"ETHER METHYLATED LONDON"

EUCALYPTUS GLOBULUS.

We distil pure oil of Eucalyptus GLOBULUS as a by-product in the manufacture of our Eucalyptus Boiler Fluid, and are, therefore, enabled to place it in quantities at a lower rate than has heretofore been asked for it.

DOWNIE B. I. P. CO., 4 Redcross St., LIVERPOOL;
And 204 MARKET STREET, SAN FRANCISCO.

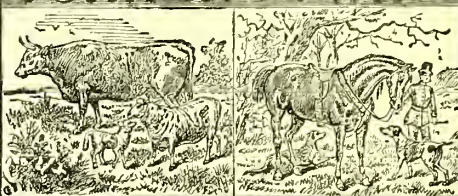
THE HUSK & SCOUR
IN LAMBS & CALVES
CURED BY
THE DEVONSHIRE
COMPOUND.

A distinct preparation from the Devonshire Oils, pronounced to be a sovereign remedy which never fails to cure this deadly disease.

In Bottles, 2/-

ESTABLISHED
1830
FOR CATTLE
& HORSES
COWS & CALVES
SHEEP & LAMBS
DOGS &c.
Both for Outward
and Inward Use
MANUFACTORY
WELLINGTON, SOM.

CORNER'S PINE'S



DEVONSHIRE OILS

SOLD EVERYWHERE
THE GREAT
REMEDY
FOR ACCIDENTS
AND ANIMAL
Sufferers by all
Wholesale
Houses
PRICE 2/-

CORNER'S FAMILY
EMBROGATIO
SHOULD BE U
ON THE CHEST OR
MEASLES.

Cures Sore Throats, and Pains in the Chest, Rheumatism, Lung Go, Scalds, Burns, Chills, Sprains, &c., &c.
1s. 1½d
SEE THOUSANDS OF
TESTIMONIALS

REGISTERED TRADE MARK, "DEVONSHIRE."

BEWARE OF FRAUDULENT IMITATIONS.

THE SELF-OPENING TIN BOX COMPANY

(GRIFFIN'S PATENT).

ALBION TIN WORKS, YORK ROAD, KING'S CROSS, LONDON, N.

Telegraph Address—"TIN BOX LONDON."



Boxes ready made up, or the Patent Tops only (ready for making up), are supplied.

THE NEW TIN BOXES for all kinds of Hermetically Sealed Preserved Foods, DRUGS and CHEMICALS.

THE NEW TIN BOXES are as cheap as the ordinary Boxes, require no soldering up, and can be opened with a penny piece.

THE NEW TIN BOXES are being adopted by the largest Food-preserving Houses and CHEMISTS, to whom references can be given.

THE NEW TIN BOXES are also perfect for Tea and Coffee Canisters, Biscuit Boxes, Confectionery, Paints, Oils, Varnishes, Soaps, &c.

THE NEW TIN BOXES are described by the *Times*, *Standard*, *Chronicle*, *Illustrated News*, *Engineer*, *Grocer*, *Oil and Colourman*, and Press generally, as the "neatest and most elegant invention ever made."

CAUTION.

IN THE HIGH COURT OF JUSTICE, CHANCERY DIVISION.

GRIFFIN v. NOAKES. 1887. G. No. 1,033. GRIFFIN v. FRAVER. 1887. G. No. 1087.

As we understand from some of our Clients that, from false representations made, an impression prevails that the proceedings in these actions have failed, we beg to inform the public that such is not the fact, and that the proceedings are being carried on as fast as possible, in the Chancery Division of the Court, to restrain the Defendants from selling or making Tins similar to those manufactured by us, and from infringing our Patents. The Defendants, pending the proceedings, have been ordered by the Court to keep an account of all sales made by them. Our Solicitors, Messrs. CLARKSON, GREENWELL & Co., have had instructions from us to proceed against all persons so offending.

FOR THE SELF-OPENING TIN BOX COMPANY, G. FEATHERSTONE GRIFFIN, Manager.

VALUABLE & INTERESTING TO EVERYBODY COMPRESSED HOPS.

Best Hops compressed into small parcels of one pound and half-pounds, and sent out in cases containing 30 lbs. each. These Hops are specially selected and compressed for keeping purposes, and will retain their aromatic strength for a considerable time.

They are introduced to the Public to enable them to make their own BITTERS, YEAST, HOME BREWING, and numerous other purposes. Full particulars given on each packet.

SAMPLES AND PRICES SENT ON APPLICATION TO

A. WILKINSON & SONS, 27 DERBY LANE, OLD SWAN, LIVERPOOL.

P.S.—Chemists will naturally see the great advantage in making their own Bitters from the Pure Hop itself.

T. BAGE BLYTON & CO.

PHARMACEUTICAL CHEMISTS,

MANUFACTURERS OF

BRITISH PHARMACOPŒIA, THROAT HOSPITAL, and every description of

MEDICATED LOZENGES & BOILED SWEETS

For sale by Chemists, for Wholesale and Export; also

COMPRESSED TABLETS, including Ammonium Chlorid., Camphor (with Sugar), Cocain, Cocain with Pot. Chlor. and Borax, "Voice Tablets"; Potassium Bicarbonate, Potassium Chlorate (from chemically pure salts), Potassium Chlorate with Borax, Saccharin, $\frac{1}{4}$ -grain, $\frac{1}{2}$ -grain, and 1-grain.

SOLE PROPRIETORS OF

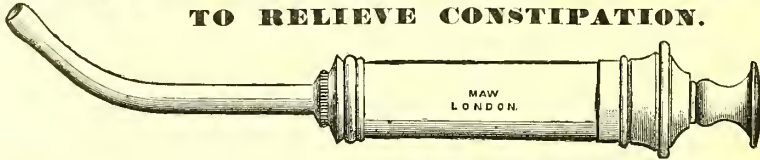
F. WEMLOW'S CHLORODYNE.

PRICE LISTS TO ANY ADDRESS UPON RECEIPT OF BUSINESS CARD.

Address—76 GORDON STREET, LOWER BROUGHTON, MANCHESTER.

IMPROVED SYRINGES

FOR THE
INJECTION OF GLYCERINE
TO RELIEVE CONSTIPATION.



PRICES TO THE TRADE—

PEWTER, 8/ per dozen; PEWTER, with Glass Barrel, 12/ per dozen; VULCANITE, 30/ per dozen;
VULCANITE, with Glass Barrel, 30/ per doz.; CELLULOID, with Glass Barrel, 45/ per doz.

S. MAW, SON & THOMPSON, ALDERSGATE ST., LONDON.

PLEASE NOTE NEW ADDRESS!!



F. SCHUTZE & CO.

Cheapest House for

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HIGGINSON'S
INTERNATIONAL

ENEMAS.

New Price List on application.

SHAFTESBURY HALL, 36a ALDERSGATE ST., E.C.

Telegrams—
"LINT LIVERPOOL."

THE
LIVERPOOL PATENT LINT CO.,
MARK ST. MILLS,
NETHERFIELD ROAD NORTH,
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LINT. FLAX, & COTTON

MANUFACTURERS OF

LINTS,

ABSORBENT, AND CARBOLIZED

COTTON WOOLS,

ABSORBENT, OPEN WHITE, and GREY

BANDAGES,

SURGEON'S, AND CARBOLIZED

TOW.



COCKING'S ADAPTABLE (PORO-PLASTIC JACKETS AND SPLINTS. Patentee and Sole J. T. COCKING, PLYMOUTH.

40,125AD

Cervical Jacket, No. 1. Cervical Jacket, No. 3.

INSTRUCTIONS
FOR MEASUREMENT.

JACKET

(in cases of slight deformity)

- Circumference at axilla.
- " " waist.
- " " hips.
- Length from axilla to great trochanter.

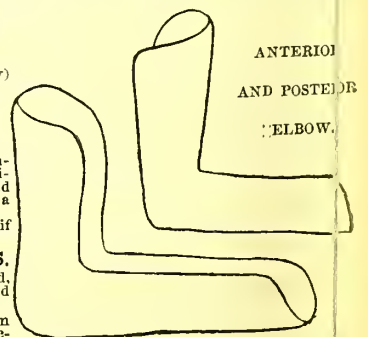
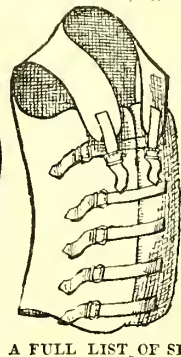
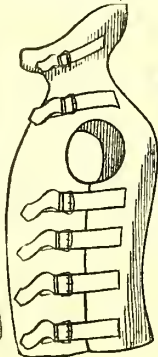
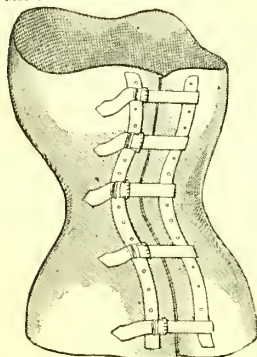
In severe angular cases circumference over apex of curve, position of ditto, and contour should be given; in lateral cases a description of the case.

In all cases it must be stated if for male or female.

CERVICAL JACKETS.

Same measurements required, and circumference at neck, and length from neck to axilla.

Any part of the Jacket can in the process of manufacture be left soft.



A FULL LIST OF SPLINTS AND PORO-PLASTIC IN SHEETS MAY BE HAD ON APPLICATION

AYRTON & SAUNDERS,

Designers and Manufacturers

OF

High-Class Artistic Specialities

FOR CHEMISTS AND DRUGGISTS;

WHOLESALE AND EXPORT DEALERS IN

PATENT LINT, PLAISTERS, AND COTTON WOOL,

MEDICAL GLASS BOTTLES,

SURGICAL INSTRUMENTS, TRUSSES, &c.

HARD AND SOFT WOOD TURNERS;

MANUFACTURERS OF ROUND, SQUARE, AND OVAL BOXES,

IN PAPER, WILLOW, AND CHIP;

IMPORTERS OF

AMERICAN, GERMAN, & FRENCH BOXES;

AND GENERAL DEALERS IN

DRUGGISTS' SUNDRIES of every description.

SPECIAL QUOTATIONS TO LARGE BUYERS FOR CASH.

WAREHOUSES—

149 & 153 DUKE ST.




FACTORY—

62 PARR STREET,

LIVERPOOL.

All Letters, Orders, &c., to be addressed to the Firm, 149 DUKE STREET.

 AYRTON & SAUNDERS will be glad to undertake Foreign Agencies and Commissions, and to buy and ship for Firms who have no representatives in England, and as they keep themselves thoroughly abreast of the times their friends can rely upon being well posted up in all the Novelties and Specialities that are being constantly introduced.

PRIZE MEDAL,
International
Health Exhibition,
1884.

THE NEW PERMANENT

AWARD OF MERIT
International
Sanitary Exhibition
1881.

ENGRAVED WINDOW TABLETS

IN RUBY, BLUE, AMBER, AND OPAL GLASS.

Send particulars of size, subject matter, and colour, when price for one Tablet and upwards will be sent.

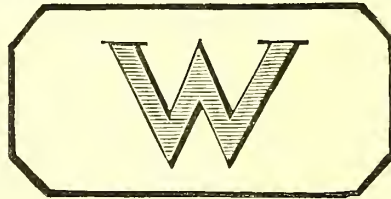
For Proprietary Articles, 100 8x6 Ruby Tablets, £3 15s. 0d.

J. R. CORSAN, THE LONDON SAND-BLAST WORKS, 80 GRAY'S INN ROAD, W.C.
TO PREVENT FRAUD, DEMAND BUSINESS CARD FROM TRAVELLERS.

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Indentors should order the
metal and make in the market;
Can be obtained through any



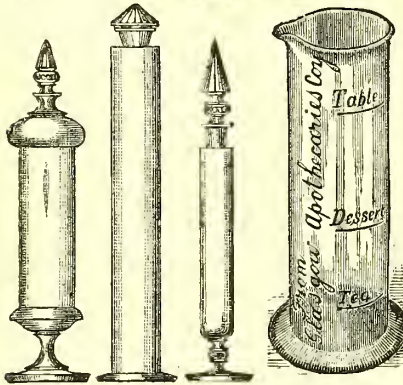
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BRAND
AND OTHER BOTTLES.

W brand; they are the best
have a worldwide reputation.
Wholesale House.

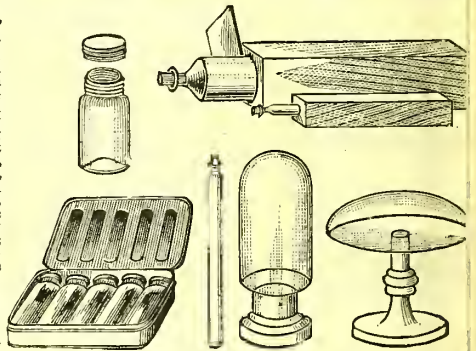
J. DUNLOP MITCHELL & CO.

130 & 138 Ingram St., Glasgow; & Old Trinity House, Water Lane, London, E.C.



Sample Bottles, Vials and Tubes,
Wooden Post Cases, Corrugated Paper
and Cardboard Boxes, Parchment and
Linen Sample Bags, Travellers' Metal and
Leather Pocket Sample Cases, fitted with
all kinds of Bottles and Tubes. Fine
Stoppered and Unstoppered and Metal
Screw Top Bottles. Large variety of Show
Bottles and Stoppered Jars for exhibiting
specimens, suitable for Show and Post
Samples of Oils, Varnishes, Spirits, Paints,
Colours, Soaps, Chemicals, Drugs, Sugars,
&c., &c. Laboratory Glassware and
Utensils. Specialities, Measuring Glasses,
as per diagram, Tea, Dessert, and Table
Spoonful, with name and address of any
Chemist neatly engraved on opposite side;
acts as a capital and permanent advertise-
ment; price 2s. per gross; named sample
gratis per post.

Correspondence solicited.
Samples or Illustrations on application.
Agents Wanted Abroad.
Telegrams: "MITCHELL GLASGOW."



DISPENSING BOTTLES & PHIALS

The following are our greatly Reduced Prices:—

CLEAR BLUE TINTED.

3 and 4 oz.	8/6 per gross.	12 oz.	11/6 per gross.
6 and 8 oz.	7/6 "	16 oz.	15/6 "

WHITE MOULDED PHIALS.
LONG OR SQUAT SERIES.

1/2 oz.	3/0 per gross.	1 1/2 oz.	4/3 per gross.
1 oz.	3/8 "	2 oz.	4/9 "

Prompt attention to country orders. Packages 1/ each, allowed for if
returned. Sample bottle sent free on application.

I. ISAACS & CO.

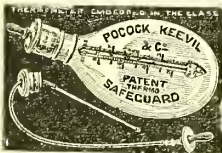
GLASS BOTTLE MANUFACTURERS,

25 Francis St., Tottenham Court Road, London, W.C.

Established upwards of 70 years.

Bankers, London and Westminster

THE PATENT THERMO SAFEGUARD FEEDING BOTTLES.



A THERMOMETER Embedded in the Glass.
REDUCTION IN RETAIL PRICES 10
1/-, 1/6, and 2/6 each.

Wholesale of London Houses and

POCOCK, KEEVIL & CO.

72 Wandsworth Road, S.W.

SPONGE IMPORTERS.

M. PETERSON & CO.

(ESTABLISHED 1870),

75 ST. ANNE STREET, LIVERPOOL.

FOR HOME, FOREIGN, & COLONIAL MARKETS.

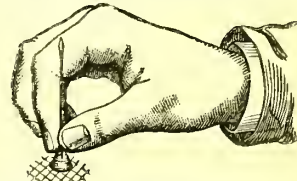
CANISTERS

WITH PERFORATED TOPS FOR
DISINFECTING POWDER.

SOUTH WALES CANISTER CO., SWANSEA

Makers, by Improved Machinery, of all kinds of
PLAIN AND FANCY TINS, DECORATED TIN PLATES
Seamless Boxes, &c., &c.

Trade Mark.



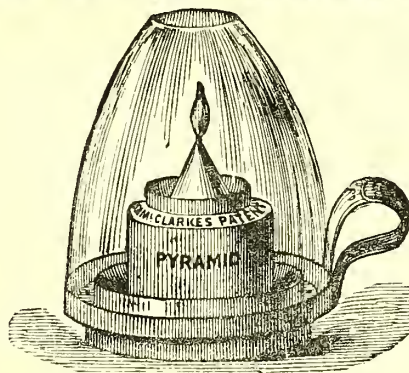
Registered.

THE ASSOCIATION for the SUPPLY of PURE VACCINE LYMPH, 13 PALL MALL EAST, LONDON, S.W. SOLE AGENTS FOR DR. WARLDMONT'S CALF VACCINE.

Tubes, 2s. each; Half Tubes, 1s. each. Pomade in vials, 5s.
HUMAN VACCINE, from healthy children only, microscopically examined and
source quoted. Tubes, two-thirds full, 1s. 8d. each. Tubes one-third full and Lan-
cet-charged Points, 1s. each. Pin-points, 1s. 1d. each. Eighteen Charged Small
Points, 6s. Tubes two-thirds full (same as those mentioned above, but without
source), in quantities for export, 2s per 100 Tubes. Pin-points uncharged, 1s. per
dozen. Vaccinations daily, between the hours of 12 and 2, by the Consulting
Physician, at the uniform fee of a guinea. F.O.O.'s (including postage, and crossed
London and Westminster Bank), with orders, payable to EDWARD DARKE, Secretary.

Office hours, 10 to 4; Saturdays, 10 to 2.

SAMUEL CLARKE'S PATENT "PYRAMID" NURSERY LAMP FOOD WARMERS.



PATENT
"PYRAMID" NIGHT LAMPS, 6s. per doz., Lacquered or Bronze
AND
"PYRAMID" NIGHT LIGHTS, 7s. 6d. per doz. boxes.
Less 5 per cent. Cash.
8 Lights in each Box, burn 9 hours each.

The "Pyramid" Night Lamps render the burning a Night Light perfectly safe, entirely prevent FLICKERING (so objectionable in all Night Lights not burned in a Lamp), are clean, portable, and render a Night Light useful for many purposes where they otherwise would not be.

The "Pyramid" Food Warmers, by their peculiar construction—the glass chimney conducting and concentrating heat to the bottom of the water vessel—a larger amount of LIGHT and HEAT is obtained than can be in any other lamp of the same class. Without SMOKE or SMELL.

The "Pyramid" Night Lights are made much larger than any other Night Light, and give double the light; they are, therefore, very suitable for nursery lamps, lighting passages, lobbies, &c., and adaptable to many purposes for which the common Night Lights are useless.

DIRECTIONS FOR USING THE PATENT "PYRAMID" FOOD WARMER AND NIGHT LIGHTS.

The food which is required to be kept hot to be placed in the porcelain panikin, and water in the tin vessel—just sufficient to admit of the porcelain panikin being placed therein. Care should be taken in lighting the Night Lights not to injure the top, which is a protection for the wick, but simply by a lighted match or taper, and allow the material to melt away.

	RETAIL.	WHOLESALE.	REDUCED PRICES—NET CASH.
No. 1 Holds Half-pint Food, besides Water, price	3s. 6d. each	.. .. 30s. per dozen	.. .. 27/- per dozen.
No. 2 " Three-quarters Pint Food " "	5s. 0d. " "	.. .. 36s. " "	.. .. 30/- " "
No. 3 " One Pint Food " "	6s. 0d. " "	.. .. 42s. " "	.. .. 33/- " "
Clarke's Hot Water Lamps	2s. 6d. " "	.. .. 20s. " "	.. .. 18/- " "
" "Pyramid" Night Lamps	1s. 0d. " "	.. .. 8s. " "	.. .. 6/- " "
" " " Lights .. ..	.. ..	.. .. 7s. 6d. " "	.. ..

} Less 5 per cent. for Cash.

CAUTION.—The Patentee, in reply to numerous consumers, begs to state that he will warrant his PATENT "PYRAMID" FOOD WARMERS answer the purpose for which they are recommended only when the "Pyramid" Night Lights are burned in them; the common night lights will give sufficient heat. Persons who find a difficulty in obtaining the "Pyramid" Night Lights in good condition are requested to write to the Patentee, S. CLARKE Patent "Pyramid" Night Light Works, Cricklewood, London, N.W., who will give the address of his nearest agent. The "Pyramid" Night Lights are best when newly made; the "Pyramid" Food Warmers are sold by all respectable dealers throughout the Kingdom, at 3s. 6d., 5s., and 6s. each.

N.B.—EXTRAS.—Porcelain Panikins, No. 1 8s. Lids 2s. per dozen,
 No. 2 9s. " 3s. " "
 No. 3 10s. " 4s. " "
 Tin Panikins, No. 1, 8s. No. 2, 10s. No. 3, 12s. per dozen.
 Clear Glasses, 4s. Roughed, 6s. Opaline, 6s.; Coloured, 6s. per doz.

PATENT "PYRAMID" NIGHT LIGHT WORKS, CRICKLEWOOD, LONDON, N.W.

N.B.—See that the Trade Mark, "PYRAMID," is on every Lamp and Light.

REVOLUTION IN THE FLY PAPER TRADE.

It must have been observed that for some time the public have become disgusted with the old poisonous fly paper, and have taken somewhat readily to a sticky sort of substitute.

The advertiser has perfected and patented a Fly Paper of this nature, which will certainly be the leading thing in this way in the future. It is a well got-up and effective paper, and is as cleanly to handle as a sheet of note-paper.

In the advertiser's own retail establishment last season the sale of this was simply enormous, as they were freely used by tradespeople (butchers, bakers, grocers, and confectioners), who would not dare to risk the danger from dead poisoned flies about their stock. Owners of horses and cowkeepers were delighted with them, as they spared the animals the torture from this source.

From the nature of the article it cannot very well be stocked by Wholesale Houses for distribution to the Retail Trade, but the Parcel Post will carry them direct from the maker, and Postal Orders will facilitate remittance.

The price is 4 6 per gross (carriage free), but where a large trade is developed more liberal terms will be given.

Send sample order for small lot, and while the season is on you are bound to do a big thing.

ADDRESS—

S. WILSON, CHEMIST, ST. HELENS, LANCS.



VESICO SUDORIFIC.

NO BLEMISH! NO REST! NO CRADLE!

VESICO SUDORIFIC is the quickest, safest, and best remedy for Splint, Spavin, Ringbone, Sidebone, Capped Hock and Elbow, Curb Windgall, Tumours, and for strengthening the Legs of Horses. Price—2/6 size, 24/ per doz.; 5/ size, 48/ per doz., with usual discount. PROPRIETOR—

C. W. GREGORY, M.R.C.V.S., BRISTOL.

Wholesale:—London—BARCLAY & SONS, EDWARDS & CO., NEWBURY & SONS, SANGER & SONS, SUTTON & CO.; Liverpool—EVANS, SONS & CO., THOMPSON; Edinburgh—RAIMES & CO.; Dublin—BOYD & GOODWIN; Cork—GOULDING & CO.

CHEESE COLOR (ANNATTO.) BUTTER COLOR. (DANISH PROCESS.) CHEESE RENNET. (PURE CALF RENNET.)

THE "EUREKA" COMPANY MANUFACTORY OF DAIRY PREPARATIONS.

PURITY, UNIFORM QUALITY, AND STRENGTH GUARANTEED.

These preparations will be found to be of the most excellent quality, pure and strong, and, manufacturing these specialities only and on a large scale, we can offer special advantages to buyers of bulk.

It will pay to write for samples, and compare quality and price with what you are using.

LONDON OFFICE for U. K. and Colonies
54 CRUTCHED FRIARS, E.C.

MESSRS. JOHNSEN & JØRGENSEN,

To whom please apply for samples and particulars

AGENTS WANTED WHERE NOT REPRESENTED.

ESTABLISHED NEARLY 50 YEARS.

DAY & SONS'

AWARDED 28 PRIZE MEDALS.

WORLD-FAMED HORSE AND CATTLE MEDICINES.

THE LARGEST SALE IN THE WORLD.



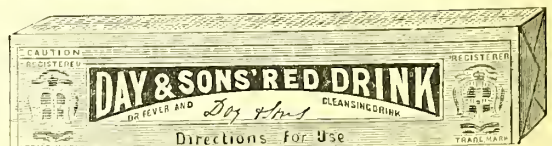
FOR Colic or Gripes in Horses and Cattle.
FOR Debility and Chills in all Stock.
FOR Scour in Calves and Lambs.
FOR Hoven or Blown Cattle and Sheep.
FOR Shivering Fits in Horses.
FOR Weakness after Lambing or Calving.

PRICE—10/ PER HALF-DOZEN, OR 19/ PER DOZEN.



FOR Healing all Wounds in all Animals.
FOR Kicks, Stake Wounds, Broken Knees in Horses.
FOR Cracked Heels and Saddle Galls in Horses.
FOR Sore Teats and Swollen Udders in Cows and Ewes.
FOR Dressing and Anointing in Lambing and Calving.
FOR Every Horse-keeper, Farmer, and Shepherd.

PRICE—2/6 PER BOTTLE.



FOR Fevers, Yellows, Indigestion, FOR Red Water, Costiveness, and Dulness.
FOR Disordered System in Cattle.
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FOR Preventing Milk Fever and Inflammation.
FOR Purifying and Increasing the Milk.

PRICE—12/ PER DOZEN PACKETS.



FOR Ill Condition, Off Appetite, Disordered System.
FOR Heat-lumps, Itching, and Scabby Skin.
FOR Hidebound, Bad Water, and Blood Ailments.
FOR Coughs, Colds, Sore Throats, and Fevers in Horses.

IN CANISTERS. PRICE—3/6, 7/, 14/, AND 21/.

THE "ORIGINAL" UNIVERSAL MEDICINE CHESTS, £2 4s. and £5. FOR ALL DISORDERS OF HORSES, CATTLE, CALVES, SHEEP, AND LAMBS.

Only Prepared by the Inventors, DAY & SONS, CREWE, CHESHIRE.

May be obtained of Burgoyne, Burbidges & Co.; Sanger & Sons; Evans, Lescher & Webb; Barclay & Sons, &c., London; Evans, Sons & Co., Liverpool, &c. Exporters are invited to apply for terms; Liberal Discount offered.

FOR ALL CANINE AILMENTS.

SPRATTS PATENT, LIMITED,

DOG MEDICINES.

Pamphlets on Canine Diseases for gratuitous distribution. Show Cards and Handbills Supplied.

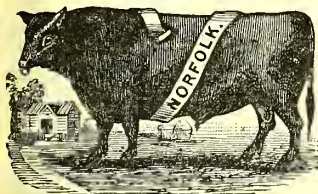
Address: **SPRATTS PATENT, LIMITED, LONDON, S.E.**
OR YOUR WHOLESALE HOUSE.

BY APPOINTMENT TO H.R.H. **BIGG'S** THE LATE PRINCE CONSORT.
SHEEP AND LAMB DIPPING COMPOSITION,
FOR DESTRUCTION OF TICKS, LICE, &c., AND PREVENTION OF FLY.

Has now been used with Greatest Success for nearly Half a Century. Pamphlets on application.

LEICESTER HOUSE, GREAT DOVER STREET, BOROUGH, LONDON.

THE "NORFOLK" VETERINARY REMEDIES are the result of 40 Years' large practice,



And have an enormous sale in virtue of their superior quality and moderate price. Used on the Royal Farms, and by thousands of Cowkeepers, Flockmasters, and Farmers in the kingdom. The leading Remedies are The "NORFOLK" CONDITION DRENCHES for Cows, Bulls, or Sheep; a sure preventive of Fever, Blood Diseases, and ordinary ailments; 9s. per dozen, 3 dozen 22s. 6d. The "NORFOLK" CORDIALINE, or PAIN KILLER, the most powerful Restorative known for Horses, Cattle, or Sheep in Colic, Calving, Lambing, &c.; 12s. per dozen, or 3 dozen 31s. 6d. The "NORFOLK" RED WOUND OILS, a rapid and sound cure for all Kicks, Cuts, Accidents, &c.; 3s. 6d. per pint, or 36s. per dozen. The "NORFOLK BROWN SPRAIN OILS," for Lameness, Old Swellings, Rheumatism, &c.; 3s. 6d. per pint, or 36s. per dozen. Usual discounts to the Trade, and special terms for Shipping Orders. Manufactured for the Proprietor only by

F. SUTTON & CO., Chemists, NORWICH, ENGLAND.

Used on the Royal Farms at Windsor, Osborne, and Sandringham, and by the principal Stockbreeders everywhere for nearly 60 years.



DAY, SON & HEWITT'S



HORSE, CATTLE, AND SHEEP MEDICINES.

THE CHEMICAL EXTRACT.

For assuaging pain and inflammation in all wounds, saddle galls, strains, bruises, swellings and relaxed tendons in Horses. For paining after calving and lambing, and for swollen udders and sore feet.

2s. 6d. per Bottle; 1/2-dozen Box, 7s. 6d.

THE RED DRENCH.

Celebrated for inflammatory disorders, such as fevers, pleurisy, foot-and-mouth complaints, yellows, surfeit, and red-water. Also for difficult calving and lambing. Admirably adapted for cleansing and checking feverish symptoms in Cows and Ewes after a bad time of parturition.

For Sheep, 3s. 6d.; for Cattle, 13s. per dozen Box.

THE GASEOUS FLUID.

Unmatched for colic or gripes and debility in Horses, for colds, chills, shivering fits, flux and diarrhoea in Cattle, Calves, and Sheep. For Ewes weakly after lambing and blown Cattle and Sheep, its effects are marvellous.

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Used as laudanum in uncontrollable spasmodic pains and violent bowel complaints. Invaluable for parturition in Mares, Cows, and Ewes.

3s. 6d. per Bottle; 1/2-dozen Box, 10s. 6d.

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For ill-conditioned Horses and Colts; invaluable after hard hunting or driving. For coughs, colds, staring coat, itching, swollen legs and want of strength. The powder given in the feed will produce fine appetite and tone.

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THE BLACK PHYSIC BALLS.

These Balls are matchless for thoroughly cleansing the system of all impurities, and for assisting in the expulsion of Worms. Their purgative action soon relieves Costiveness of the Bowels, and checks all Feverish Symptoms arising from gross habit.

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THE BRONCHOLINE.

The great and reliable remedy for Husk or Hoarse in Cattle, Heifers, Calves, and Sheep. Its gaseous odour destroys the worm or parasite in the windpipe, removes the hard cough, and soothes the lungs and other organs.

2s. 6d. per Bottle; 1/2-dozen Box, 7s. 6d.

THE "KEY TO FARRIERY."

A small work published by us on the general ailments of stock, their treatment and cure.

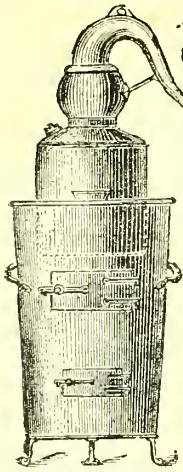
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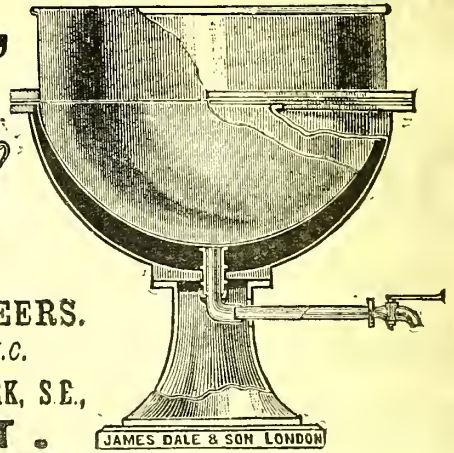
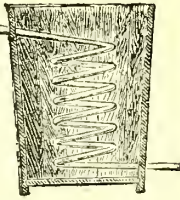
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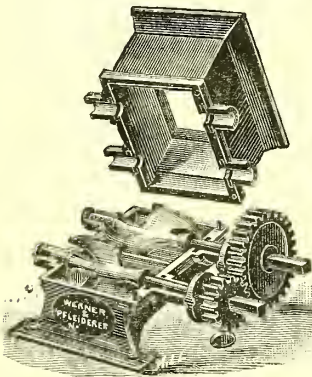
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ALSO FOR Horse Balls, Tooth Pastes, Ointments, Soaps, Powders, and for general Mixing and Incorporating.

REPLACES WITH ADVANTAGE ALL OTHER APPLIANCES FOR THESE PURPOSES.

Made in various sizes, to do from 1/2 lb. up to 1 ton at a time.

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MENTHOL CONES GUARANTEED PURE.

No. 4. 4d.

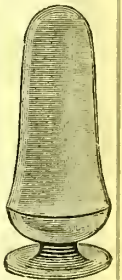


Retail No. 1 Price 2d.

Write for complete Price List.

No.	Description	Per 1/2-Gross	Per 1-Gross	Per Gross
1	Polished Willow-wood Boxes—Pull-off lid	3/9	6/9	11/6
2	Do. do. do. do. Acorn	4/9	8/9	15/0
3	Boxwood Boxes—Screw lid, Pedestal shape	6/6	12/3	21/0
4	Do. do. do. do. (larger)	7/3	13/3	25/0
5	Do. do. do. Barrel shape	7/3	13/3	23/0
6	Do. do. do. Button shape	8/6	16/3	31/0

All Orders for 1/2-gross & upwards are sent Carriage Paid.



SPECIALLY ASSORTED PARCELS SUPPLIED AS UNDER.

ASSORTED PARCEL No. 1 (1/2-Gross).

	Costing	Selling at
1 doz. No. 1 at 1/2-gross price	1/3	2/0
1 " " 2 " " " "	1/7	3/0
1 " " 3 " " " "	7/6 1/2	10 1/2
1 " " 4 " " " "	7/1 1/2	1/0
1 " " 5 " " " "	7/1 1/2	1/0
1 " " 6 " " " "	7/8 1/2	1/6
3 doz. costing 5/3, retailing 9/4	5/3 1/2	9/4 1/2

Being a profit of 4/1, namely 77 per cent.

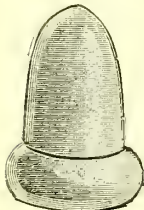
ASSORTED PARCEL No. 2 (1/2-Gross).

	Costing	Selling at
2 doz. No. 1 at 1/2 gross price	2/3	4/0
2 " " 2 " " " "	2/11	6/0
1 " " 3 " " " "	1/0 1/2	1/9
1 " " 4 " " " "	1/1 1/2	2/0
1 " " 5 " " " "	1/1 1/2	2/0
1 " " 6 " " " "	1/4 1/2	3/0
6 doz. costing 9/9, retailing 18/9	9/9	18/9

Being a profit of 9/0, namely 92 per cent.



No. 5. 4d.



No. 2. 3d.

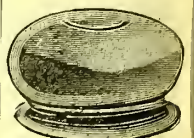
ASSORTED PARCEL No. 3 (1 Gross).

	Costing	Selling at
3 doz. No. 1 at the rate of 11/6 per gross	2/10 1/2	6/0
3 " " 2 " " " "	3/9	9/0
1 1/2 " " 3 " " " "	2/7 1/2	5/3
1 1/2 " " 4 " " " "	2/10 1/2	6/0
1 1/2 " " 5 " " " "	2/10 1/2	6/0
1 1/2 " " 6 " " " "	3/10 1/2	9/0
12 doz. costing 18/10, retailing 41/3	18/10 1/2	41/3

Being a profit of 22/5, namely 119 per cent.

A sample of each of the six shapes of the "Mikado" cones sent post free for 1/3. Send for this set of samples and judge of the quality & cheapness of our cones.

Terms—NET CASH. Please cross all cheques, and make them payable to the **MIKADO MENTHOL COMPANY.** Being in the suburbs of London, labour and rent is cheaper, the benefit of which we give to our customers.



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For all kinds of decoration on Wood or Iron. Dry with a surface like Porcelain. Sold in small or large Tins, or in bulk. Prices and shades on application.

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PAINTS & COLOURS OF ALL KINDS.
MIXED PAINTS READY FOR USE,

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BALL DENOTES COLOUR OF PAINT.

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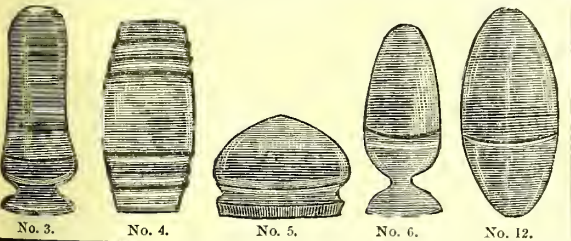
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PRICE 1s. 1½d. PER BOX, [2]

Has been extensively used in Royal and distinguished circles for over half a century, still maintaining its pre-eminence against all competition. Relief immediate, cure certain, and comfort, however tight the boot.

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ORDERS FROM ABROAD EXECUTED THROUGH SHIPPERS.



PURE SPIRITS OF WINE.

60 o.p., 20/3 per gall.; 56 o.p., 19/9 per gall.

1/ per Gall. Discount for Cash with order.

Further allowance for quantity. STEAM STILL ONLY.

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ST. ANDREW'S DISTILLERY, CLERKENWELL RD.
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(REGISTERED.)

AND

FRIZZETTA

(REGISTERED.)

Price, 1/9 & 4/6.

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SUPPLIED BY ALL PATENT MEDICINE HOUSES.

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No. 6	Pillar Shape	Polished Whitewood Boxes	2/-	Write for Full Price List.
No. 3	Pedestal	Boxwood	3/6	
No. 4	Barrel	"	3/6	
No. 5	Hat	"	3/-	
No. 12	Egg	"	3/4	
Assorted C parcel (3 Gro.), 1 doz. No. 6, 4 doz. Nos. 3, 4, 5, 12			7/9	Carriage Paid.
D " (1 "), 2 " " " 1 " " " " "			14/-	
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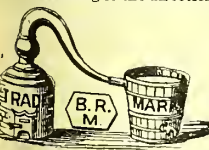
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One Ounce of these Waters added to Forty Ounces of Distilled Water forms a clear Medicated Water (without filtering), similar in every respect to those prepared according to the directions of the British Pharmacopœia, and free from all Chemical impurity. They will keep good any length of time in any climate.

Aqua Anethi, Concent., 4/ lb. | Aqua Cinnam. Ver. Concent., 6/ lb. | Aqua Fœniculi, Concent., 4/ lb. | Aqua Pimentæ, Concent., 4/ lb.
" Anisi " 4/ " | " Cassia " 4/ " | " Menth. Pip. " 4/ " | " Rosæ " 8/6,
" Camphoræ " 4/ " | " Flor. Aurant. " 8/6 " | " Ang. " 6/ " | " Rosæ Virgin. " 10/6,
" Carui " 4/ " | " Flor. Sambuci " 8/6 " | " Virid. " 4/ " |

The above are put up in Bottles of ½ lb. or 1 lb. and upwards, each of which has the Inventor's Protection Label over Cork. From the LANCET, July 15, 1882:—"CONCENTRATED WATERS (Robinson's, Pendleton, Manchester).—Among the samples sent to us we find Aq. Anethi, Anisi, Cinnam. Ver., Rosæ, and some dozen of others. Diluted with forty parts of water they form the ordinary waters of the Pharmacopœia. They are excellent in quality, and will be very useful, especially in country practice."

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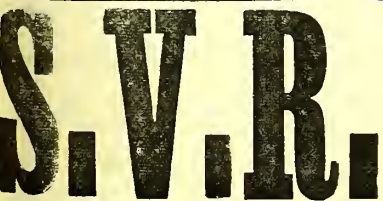


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PURE GRAIN SPIRIT 56 O.P. ... 18/5
Do. Do. DOUBLE DISTILLED 18/9

Cash with Order. Reductions for Larger Quantities than Two Gallons.

S. S. & Co.'s Speciality for Perfumery. Samples free.

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“Attractive, Effective AND Profitable Advertisement.”

With all Orders for **£2. 2s. 0d.** net we shall present a **LARGE SHOW CONE**, 18 inches high, made in “**TERRA COTTA**”. This is a very attractive window ornament, and quite novel, the Model representing one of our No. 161 Cones with the lid off, and the Cone showing a splendid white in striking contrast to the red foot.

All our Cones are guaranteed **Pure Menthol**, and our Prices are the **LOWEST** in the market, if **SIZE** of Cone is taken into consideration. Our Boxes are all branded, and buyers may have their own names on for quantities of five gross free of charge; the Boxes do not then bear **OUR BRAND**.



No. 202.



Nos. 88 & 162.



Nos. 203, 205, 206.

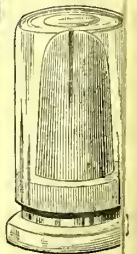
Nos. 161, 162, 163, 201, 202, 203, 204, 205, 206, 207, 208. **IN BOX LIKE THIS.**



No. 200.



No. 163.



Nos. 214, 214a and 217.

Importers, Exporters, and the Home Trade, please keep this page for reference.



Nos. 89, 90, and 92.



No. 201 and 201B.

No.	Description	Per dozen	Size
88.	Hard Wood Boxes, Pedestal Shape	2/6	1/
89.	Nickel Screw Capped Bottles	4/6	1/
90.	"	3/8	9d.
92.	"	4/2	1/
161.	Boxwood Boxes, Acorn Shape	3/11	1/
162.	" Pedestal Screw Lids	3/11	1/
163.	Vegetable Ivory, Acorn Shape	5/0	1/
200.	Boxwood Boxes, Pedestal	3/0	6d.
201.	" Barrel Screw Lids	3/11	1/
201B.	" " Extra Large	5/10	1/
202.	" " Cone	3/11	1/
203.	" " Cone	5/10	1/
204.	Vegetable Ivory, Castle Shape	5/10	1/
205.	Boxwood Boxes, Cone Shape, each in box	3/3	6d.
206.	" " as No. 205, Large Size	4/8	1/
207.	" " Draughtsman Shape	4/11	1/

A Sample Box containing one each of above, 8/; by post 9/.

In ordering through Merchants and the Wholesale Trade, from whom our preparations may be had at above prices, please state distinctly

5 per cent. Discount for Cash with Order.

“ACME BRAND” AND HOCKIN’S.

Special Quotations for Large Quantities.

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HOCKIN, WILSON & Co.

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CHLORIDE OF GOLD
 19/- per dozen
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 (guaranteed);
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 IMPORTERS OF
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Send for prices and samples.

PERFUMES, No. 30.
FIFTY KINDS.
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 Samples of any kind for 2 stamps.
 In buying, compare my Perfumes with other makers', and buy the best.
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 blanks, or address, we supply a complete set of 17 Rubber Stamps, as "POISON; FOR EXTERNAL USE ONLY; THE LOTION;" &c., by means of which labels, &c, may be rapidly printed as required.
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RELATINE PILL-COATING MACHINE.
 See Chemist and Druggist Diary for 1887, page 246.
 SMALL MACHINE TO COAT 96 PILLS EACH TIME, £3 3s.
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 London Agents—S. MAW, SON & THOMPSON.

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CAPPER'S CRINIDONE, THE HAIR PRODUCER,
 WILL PROVE A BOON.
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PETROLEUM JELLY.
 EQUAL TO AND CHEAPER THAN VASELINE.
SANITARY FLUID AND SHEEP DIP,
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 GREASE, PITCH, ASPHALTE, AND ALL PRODUCTS OF TAR AND ROSIN.
Samples and Prices on application.
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 This splendid preparation, which is selling immensely, can be had wholesale from
EDWARDS & SON, LONDON; EVANS, GADD & CO., EXETER
 Special Terms for Agencies. Enquiries solicited.
 Sole Proprietor and Manufacturer,
GEORGE STOCKER, CHEMIST, EXETER.

CARMINE PUR.
 Chemists and others requiring Pure Carmine of the FINEST QUALITY will find this far superior to any other. It is intensely rich and brilliant in colour, perfectly soluble, and offers great advantage in price.
 1 oz., 2s. 3d.; 4 oz., 8s.; 1 lb., 30s., nett cash, free by post.
J. SELLERS, 57 Farringdon Road, London, E.C.

THE ONLY PERFECT ENEMA OBTAINABLE.

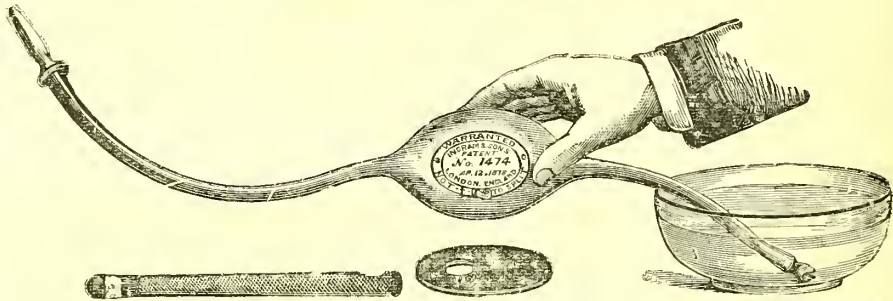
INGRAM'S IMPROVED HIGGINSON ENEMA AND SYRINGE APPARATUS

(BY ROYAL LETTERS PATENT).

Made without Seams or Ribs by our Patent Process of dipping in a solution of India Rubber, thus adding great strength and durability.

NONE GENUINE UNLESS STAMPED WITH NO. OF PATENT 1474.

CAUTION.—The only Enema made without Ribs.



All Imitations may be detected by the Ribs on the Surface, and are always liable to split.

WARRANTED NOT TO SPLIT.

A.—Metal Pin Valve.

INGRAM'S IMPROVED PATENT SEAMLESS ENEMA is perfectly smooth on the surface, will not become hard or sticky, will not leak, and will not admit air while injecting or refilling. Specially prepared to resist the heat of tropical countries.

The great superiority of INGRAM'S IMPROVED PATENT SEAMLESS ENEMA over all others has given rise to VARIOUS IMITATIONS, and it has become imperative that the Patentees should, in order to PREVENT DECEPTION, explain the PROCESS OF MANUFACTURE OF THEIR ENEMA and the MODE OF MANUFACTURE OF IMITATIONS thereof, as they have UNDENIABLE PROOF that INFERIOR ENEMAS are positively BEING SOLD as their "ADVERTISED" PATENT SEAMLESS ENEMA.

INGRAM'S IMPROVED PATENT SEAMLESS ENEMA is made by a NEW PATENT PROCESS, viz.: By repeated dipping in a solution of India Rubber until the required substance is attained. This process adds greatly to its STRENGTH and DURABILITY, and, at the same time, dispenses with ALL SEAMS, which, as is well known, are weak points in an Enema. This improved mode of manufacture (the result of long study and experience) enables the Patentees to produce a PERFECT ENEMA WITHOUT SEAMS, thus overcoming the great fault to be found in ALL other Enemas, viz.: SPLITTING AND LEAKING, which has always been a source of trouble.

INGRAM'S IMPROVED PATENT SEAMLESS ENEMA is fitted with IMPROVED VALVES, which prevent the admission of air with the fluid and CAN at any time BE REPAIRED, if necessary.

CAUTION.—Imitations of INGRAM'S IMPROVED PATENT SEAMLESS ENEMA are made of several pieces of Sheet India Rubber, which are cemented together and shaped in a mould, thus PRODUCING RIBS ON THE SURFACE, and ENEMAS SO MANUFACTURED ARE ALWAYS LIABLE TO SPLIT AND LEAK AT THE SEAMS, AND THUS TO BECOME QUITE USELESS.

INGRAM'S IMPROVED PATENT SEAMLESS ENEMA may be distinguished from ALL IMITATIONS by its ENTIRE FREEDOM FROM RIBS OF ANY DESCRIPTION on its surface, and by having an IMPROVED METAL PIN VALVE at the suction end A; and it is acknowledged to be the ONLY PERFECT ENEMA OBTAINABLE.

Patented in England, No. 1474, April 12, 1878; in France, No. 126,909, October 11, 1878; and in America, No. 212,939, March 4, 1879.

To be obtained of all Surgical Instrument Makers, Druggists' Sundriesmen, Chemists and Druggists, on the three following qualities:—

No. 1a. Highly Polished, in Red, Green, Blue, Black, or White.

No. 1b. Unpolished, in Red, Green, Blue, Black, or White.

No. 2. Unpolished, in Drab only.

Favourably noticed in "British Medical Journal," December 13, 1879; in the "Lancet," January 3, 1880; and in "British Medical Journal," September 30, 1882.

W. CLARK'S SPECIALITIES FOR HOUSE, STABLE, & FIELD.

BOOT TOP FLUID,

For cleansing and preserving Boot Tops, totally eradicating all stains, and restoring their original colour.

Made in five colours—White, Light Brown, Nut Brown, Mahogany, and Pink.

BOOT TOP POLISH

Is a cream to be used after the Fluid to polish the Top. It also nourishes the Leather.

BOOT TOP POWDERS.

IN ALL COLOURS.

These Powders have been before the public for 30 years, giving the highest satisfaction, keeping Boot Tops equal to new. These Powders never turn Black.

SADDLE PASTE.

This preparation is for softening and preserving all kinds of

Saddles, Bridles, Driving Reins, and every description of Brown Leather. It cleans, softens, and imparts a handsome appearance.

BREECHES PASTE.

This Matchless Paste for Leather, Kersey, and Cord Breeches, &c., will be found far superior to any that has ever been offered to the public; it will cleanse and beautify, rendering them soft and pliable; does not require rubbing, and will not rub off. Warranted perfectly free from dust, and needs but one trial to prove its superiority over all others.

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None other is used in the Queen's Establishments.

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For restoring and preserving all kinds of Patent, Enamel, and Morocco Leather; also Brown Leather Boots, &c. It renders them perfectly elastic. It will not attract heat. Likewise for cleaning and restoring Oil Paintings, Carriage Panels, &c. For French Polished, Japanned, and Varnished Goods it will be found unequalled.

NE PLUS ULTRA RAVEN JET FRENCH VARNISH.

WARRANTED NOT TO CRACK.

It is entirely free from any offensive smell common to most polishes. It instantly produces the most brilliant polish on the ordinary Walking as also Patent Dress Boots and Shoes for morning or evening wear.

ELASTIC WATERPROOF VARNISH.

For Hunting, Shooting, Fishing, or ordinary Walking Boots, Coach and Cab Heads, Phaeton, Gig, Cart Aprons, &c., especially old Enamelled Leather, and for all kinds of Indiarubber Goods, particularly for Goloshes. It will not crack or wear brown. Applied to the soles of boots and shoes they will be proof against wet.

HOPLEMUROMA.



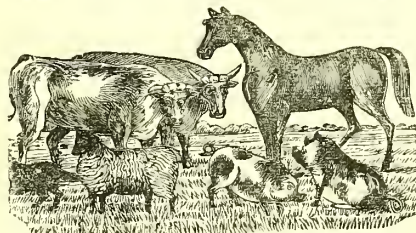
Cures horses' brittle and shelly feet, sand cracks, seedy toes, diseased frogs, fever, quitor, rapidly increasing the growth of the horn, and preventing horses throwing their shoes, making the hoof tough, and prevents all lameness. This preparation is warranted to cure all the above diseases, has been before the public for 30 years, and never known to fail. No owners of horses should be without this invaluable preparation.

MARVELLOUS EMBROCATION.

FOR HORSES AND CATTLE.



Takes away all soreness, and gives immediate relief and speedy cure in cases of lameness, bruises, sores, sprung sinews, sprains, enlarged joints, overreach, splints, corns and wind galls, also cuts, broken knees, wrung shoulders, sore backs, chapped heels, sore throats, influenza, and rheumatism.



HORSE BALLS—

Fever, Cough, Diuretic, Astringent, Condition, and Alterative.

COLIC DRAUGHTS.

For Flatulent and Spasmodic Colic.

FEVER DRAUGHTS.

For Shivering, Dulness, &c.

CRACKED HEEL LINIMENT.

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HEALING LINIMENT.

For Scratches, Cuts, &c.

BLISTERING OINTMENT.

For Splints, Spavins, &c.

CONDITION MEDICINE

ALTERATIVE POWDER.

FEVER POWDERS.

Prepared by **W. T. CLARK, M.R.C.V.S.L.**

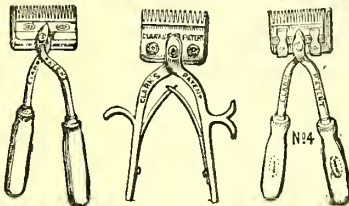
MARVELLOUS EMBROCATION.

FOR DOMESTIC USE.



Cures Bronchitis, Sore Throats, Rheumatism, Lumbago, Wheezing in the Throat or Chest, Sciatica, Sprains, Bruises, &c.

HORSE CLIPPERS.



No. 1.—This well-known Instrument has been before the public for 16 years, and has given universal satisfaction, and is everywhere acknowledged to be by far the best, and therefore the cheapest, in the market.
No. 2.—One-handed Clipper for heads, manes, quarters, and difficult parts, leaving one hand at liberty to hold the horse, thus enabling the clipper to be performed by one man only.
No. 4.—A two-handed instrument, with the Patent Grasshopper Springs over the plates. This improvement renders the machine simply perfect, producing a softness and ease of motion not to be surpassed.

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KEENE & ASHWELL'S HOMŒOPATHIC MEDICINES, AND AGENTS' SHOW CASES.

OUR £5 AGENTS' CASE,

IN MAHOGANY, WITH BENT-GLASS FRONT, AND ORNAMENTAL WORK ON TOP, WITH BEVELLED MIRROR.



This Case takes up the same room on Counter as the 4-Guinea Case,

AND

**CONTENTS REALISE
AT RETAIL PRICES £10 1s.**

The same in Oak, American Walnut or Ebonised Wood, 7/6 extra.

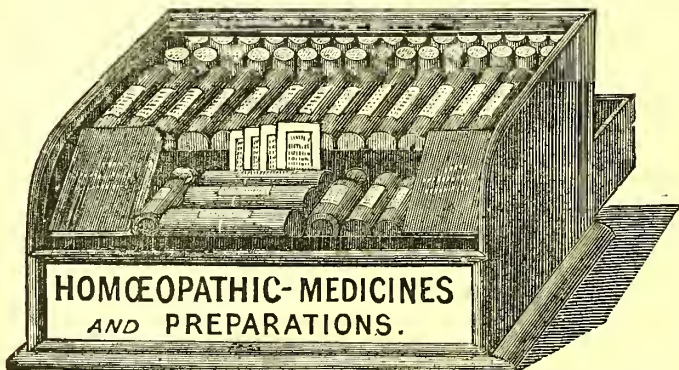
CONTAINS—

	£.	d.
93 bottles of Tinctures to retail at	1/-	45 0
93 " " Pills	1/-	45 0
10 " External Tinctures to retail at	1/-	00 0
2 " Homeopathic Camphor	1/-	02 0
2 " Camphor (Rubini's)	1/-	02 0
6 " Camphor Pills	1/-	06 0
2 copies of a Domestic Work on Homeopathy	1/-	02 0
4 packets of Arnica and Calendula Plaster to retail at	6d.	02 0
		<u>100 0</u>
Retail	£10	0

Pamphlets on the treatment of "Common Complaints," free.

OUR £4 4s. AGENTS' CASE,

IN MAHOGANY, WITH BENT-GLASS FRONT.



CONTENTS REALISE £9.

The same Case in Oak, American Walnut or Ebonized Wood, 6/- extra.

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	£.	d.
80 bottles of Tinctures to retail at	1/-	40 0
80 " Pills	1/-	40 0
8 " External Tinctures to retail at	1/-	00 0
2 " Homeopathic Camphor	1/-	02 0
2 " Camphor (Rubini's)	1/-	02 0
4 " Camphor Pills	1/-	00 0
2 copies of Dr. Wood's Book "Easy Homeopathy"	1/-	00 0
4 packets of Arnica and Calendula Plaster to retail at	6d.	00 0
		<u>90 0</u>
Retail	£9	0

Pamphlets on the treatment of "Common Complaints," free.

Dimensions—9½ in. high, 18½ in. wide, 14 in. deep.

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FLATS OR OVALS.

Size ...	1 oz.	1½ oz.	2 oz.	3 oz.	4 oz.	6 oz.	8 oz.	10 oz.	12 oz.	16 oz.	20 oz.	24 oz.	32 oz.	40 oz.
Per Gross	9/-	9/6	10/-	10/6	10/6	11/6	11/6	16/-	17/-	21/-	25/-	27/6	36/-	40/-

Discount : 10 per cent. Monthly, 5 per cent. Half-yearly.

ALSO

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Carriage paid to Bristol, Glasgow, Liverpool, or London.

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Size ...	1 oz.	1½ oz.	2 oz.	3 oz.	4 oz.	6 oz.	8 oz.	10 oz.	12 oz.	16 oz.	20 oz.	24 oz.	32 oz.	40 oz.
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BEST GREEN FLINT FLATS OR OVALS.

CATALOGUE No. 42.

Size ...	½ oz.	1 oz.	1½ oz.	2 oz.	3 oz.	4 oz.	6 oz.	8 oz.	10 oz.	12 oz.	16 oz.	20 oz.	24 oz.	32 oz.	40 oz.
Per Gross	6/-	6/-	6/-	6/-	6/8	6/8	7/9	7/9	10/6	11/6	15/-	19/-	22/-	27/6	32/-

STRICTLY NET CASH.

CASKS OR CRATES EXTRA.

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"THE BEST NATURAL APERIENT."

Persistent attempts are made by interested parties to deceive the public by offering Natural Mineral Aperient Waters with marks, names, and designations very similar to those which are used by the

APOLLINARIS COMPANY, LIMITED

FOR THE

NATURAL MINERAL APERIENT WATERS

IMPORTED BY THEM.

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CADBURY'S COCOA ESSENCE

The medical profession order Cadbury's Cocoa Essence in thousands of cases as the most wholesome beverage. Be se

you get it when asked for, as imitations are often pushed for the sake of extra profit.

"We have carefully examined the samples brought under our notice, and find that they are genuine, and that the Essence of Cocoa is just what is declared to be by Messrs. Cadbury Brothers."—*Lancet*.

"Cocoa treated thus will, we expect, prove to be one of the most nutritious, digestible, and restorative of drinks."—*British Medical Journal*.

GUARANTEED PURE AND SOLUBLE.

SOLE IMPORTERS

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SPECIAL PRICES ON APPLICATION.

THE CHEMIST & DRUGGIST

SUPPLEMENT.

Businesses Wanted.
Businesses for Disposal.
Premises to Let.
Auction Sales.

SATURDAY, MAY 26, 1888.

Partnerships.
Situations Vacant.
Situations Wanted.
Miscellaneous.

This Supplement will be given free to any Chemist and Druggist or Assistant who will call for it at 42 Cannon Street on Friday afternoon, or will be posted on Fridays to any one who sends an addressed postal wrapper.

ADVERTISEMENTS for this Supplement can be received on FRIDAY MORNING, first post, though it is requested that these may be sent in as early in the week as possible.

EXCHANGE COLUMN ADVERTISEMENTS will appear on page 10 (bottom folio), and must be received not later than THURSDAY AT NOON, to appear in the issue of the Saturday following.

All Advertisements for this Supplement and Exchange Column must be prepaid. Remittances payable to EDWARD HALSE and crossed MARTIN & Co.

OFFICES: 42 CANNON ST., LONDON, E.C.

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CHEMISTS' TRANSFER AGENTS.

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1846, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—LONDON, W.—First-class locality; ready money; profitable retail; largely specialities; situate in busy locality; the business is very profitable, and requires the investment of £1,000. Particulars on application.

2.—LONDON, N.—Dispensing, Prescribing, and Retail; situate in a rapidly-increasing locality; returns average £450 yearly, can easily be doubled by an energetic man, well fitted shop and good stock; new lease will be granted; price about £450.

3.—LONDON, N.W.—Retail, Prescribing, and Dispensing; returns average £450; capable of being largely increased; large handsome shop and good stock; good house and garden; about £250 required.

4.—LONDON SUBURBS, S.E.—Prescribing and General; retail; with large profits; returns nearly £450; well-fitted shop and good stock; convenient house, good garden, &c.; vendor taking a larger business will accept any reasonable offer.

5.—LONDON, N.W.—Handsome fitted shop; good nucleus; present returns about £25 per month under an assistant, the vendor being absent. Less than the value of stock and fixtures will be accepted.

6.—LONDON, W.C.—Dispensing and Retail for sale under exceptional circumstances; present returns, £12 per week; can be largely extended; good stock; well-fitted shop; rent low; open to an offer.

7.—HOME COUNTY.—Good Market Town.—Mixed Country business; returns £2,500, with good profits; comfortable house; moderate rental; terms £150 goodwill and valuation of stock and fixtures.

8.—LIVERPOOL.—Retail Dispensing and Prescribing; returns about £500; single fronted shop; well fitted and good stock; house has six rooms; rent very low; price about £350.

9.—INLAND WATERING-PLACE.—Homoeopathic and Dispensing business; established seven years; returns nearly £750; good profits; house has ten bedrooms and private entrance, well suited for letting. Full particulars on application; about £600 wanted.

10.—LANCASHIRE.—Attractive locality; good-class Retail and Dispensing, with some medicine-chest trade; returns nearly £750; net profits £300; good house, well situate; price £700.

11.—DERBYSHIRE.—First-class Retail and Dispensing; returns over £600, with good profits; large, handsome, double-fronted shop, corner position; valuation of stock and fixtures only required.

12.—KENT.—First-class Business for disposal on very easy terms, in consequence of dissolution of partnership; returns about £1,000; large, hand-somely-fitted shop and good stock; price about £800, £400 down, remainder by easy instalments.

13.—HOME COUNTY.—Mixed trade; returns nearly £2,200, with good net profits; good opening for much larger business; valuation of stock and fixtures only required; genuine concern; worth attention.

14.—SUSSEX.—First-class Pharmacy for disposal; returns nearly £1,350; large handsome double-fronted shop and good stock; about £1,000 is required.

N.B.—NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country; particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION. Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms, where business of a confidential nature requires the special attention of a London agent.

ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.

PARSON C. BAKER,

8 Stockbridge Terrace, Victoria Station, S.W.

25 Years' Experience Valuation for Probate, &c.

1. ESSEX.—Returns £630; rent £22; price £400.
2. LANCASHIRE.—Returns £1,025; rent £88; price £950.
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4. LONDON, N.—Returns £300; rent £45; price £180.
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6. HANLEY.—Returns £930; rent £30; price £600.
7. DURHAM.—Returns £1,000; rent £46; price £500.
8. CAMBERWELL.—Returns £400; rent £28; price £200.
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10. LEYTONSTONE, E.—Returns £240; rent £40; price £225.
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Some of the above newly established increasing rapidly.

THOS. TOMLINSON & SON, CHEMISTS AND DRUGGISTS' VALUERS

9 New Cannon St., MANCHESTER,

Have the most experienced Practice in the Profession.

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STOCKTAKING OR OTHERWISE.

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3s. 6d. for fifty words; 6d. for every 10 words beyond.

TO Surgeons and Chemists—To be sold, for £550, a House and Shop, with plate-glass front, in good condition, with neat fixtures and business; opened 1882 as a Provident Dispensary in a rapidly improving street, the only one of business connecting two sections of a new, flourishing, and wealthy town on the South Coast; cause of selling, age and insufficient time. "Medicins," Ivy House, Goldstone Road, Hove, Brighton.

SALE BY TENDER.—F. J. Brett, Leicester, is instructed by Mr. E. B. Storm, of Lincoln, to offer by tender the Business as now and for several years carried on by him at 214 High Street, Lincoln: the Business is a good-class, profitable Retail, returning about £1,200; the position is one of the best in the city; the shop, office, &c., are handsomely fitted and convenient; there are several good proprietary articles capable of great development; in consequence of Mr. Storm being desirous of accepting a very lucrative offer, he is prepared to sell for cash at a discount off the usual valuation; tenders will be opened on Tuesday, June 5, at Lincoln, by F. J. Brett. Forms of tender (now ready) and further particulars can be had of F. J. Brett, Trade Valuer, 60 St. Stephen's Road, Leicester.

TO LET.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

SHOP and House, situate No. 180 The Grove, Stratford; splendid business position, near 3 railway stations; thousands pass daily; suitable for a Chemist and Druggist. Apply to the Freeholder, Edward Jex, 27 St. Mary-at-Hill, Eastcheap, London.

TO Retired Chemists and Others.—The upper part of a Shop, facing the sea, having private door, two bedrooms, sitting-room, and kitchen, to let on reciprocal terms for a permanency; partial board would be accepted in lieu of rent. Batchelor, Brunswick Pharmacy, West Worthing, Sussex.

WATERLOO.—To be Let, new corner Shop and House in good thoroughfare and rising neighbourhood; good opening for a Chemist and Druggist; one window can be seen for three-quarters of a mile in a well-inhabited thoroughfare. Apply to T. Breckell, 34 Mount Pleasant, Waterloo.

BUSINESS WANTED.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

A GENUINE Business, in good country town, or growing London suburb not objected to, returning about £800 or more. Full particulars to Mr. Edwards, Pharmaceutical Chemist, 4 Blisset Street, Greenwich.

BUSINESSES FOR DISPOSAL.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

FOR SALE, a Chemist's Business in densely populated part of Leeds; turnover £8 weekly, which might be considerably increased; present owner retiring from business; rent £32; price £225. Apply, B. Hirst, Broke & Hirst, Leeds.

A N old-established Chemist and Druggist's Business, in small town in Midland Counties; in present hands nearly quarter of a century; rent £24; freehold may be purchased if preferred; return about £400 per annum. Apply, E. & H. Allison, Hull.

MIXED Village Trade; returns £600; good profits; Presently engaged in Tooth-extracting, Sheep-dipping, and Farmers' trade; every day; price £420, or fair offer; vendor taken larger concern, may be sold. Address, "Chemist," Lynch & Co., Alderagate Street, London, E.C.

MINERAL Water Business to be sold, upon most advantageous terms; large and old-established connection; valuation of fixed plant, machinery, horses, carts, &c., only required; cash about £1,800. Apply to Fleuret & Sons, Auctioneers, 23 Southampton Row, Holborn, W.C.

GOOD-CLASS ready-money Retail, Dispensing, and Prescribing; good fittings; capital stock; large house, garden; splendid position in large town; no goodwill; price about £300; special terms for disposal. 227/7, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

I N a rapidly-increasing suburb of East London, a newly-established well-fitted and stocked corner Shop in main road, centre of district; rent £40; already paying all expenses under manager; owner cannot give attention, and will sell for value of stock and fixtures. Apply, Y. Z., care of Mr. Baker, 8 Stockbridge Terrace, S.W.

£100.—UNOPPOSED Business, Somerset; very pretentious; excellent house; large garden, well stocked with fruit trees; to a man accustomed to a country trade this affords an exceptional chance; price, £100, includes stock and fixtures, two large green-houses, and vines. F. J. Brett, 60 St. Stephen's Road, Leicester.

VILLAGE Business in the Midlands; in consequence of having saved money and taken larger business; Retail and Prescribing trade, returning £500, with a clear net profit of £202, after paying all expenses; good house, rent £29; price only £350, or valuation; no goodwill. Apply to G. H. W., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

UNOPPOSED Business in Hampshire for immediate sale; population nearly 2,000; returns under assistant £6 weekly; good-class trade; principal would do £10 to £12 immediately; rent low; good house and premises; mixed trade can be added; price only £150, less than valuation. Apply to "Hampshire," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

CHEMIST and Druggist's Business in Warrington.—To be disposed of, as a going concern, and by private treaty, the Goodwill, Trade, Stock, Shop Fixtures, and Fitting of a Business situate in a capital position fronting a main street near the centre of the town; there is excellent dwelling-house accommodation, and the rent is moderate. Apply to Mr. Lewis Voisey, Chartered Accountant, Warrington.

RETURNS £400; good profits; no premium; must be effected immediately; stock and fixtures only to be taken at valuation, about £200; present owner cannot attend to it, having other occupation; large corner house in main road, pleasant and convenient suburb; rapidly increasing; upper part let, so will suit a single man who is a general prescriber and tooth extractor, or for a branch. Letter only, Martien, Queen's Road, Teddington.

SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

JUNIOR, at once, about 20, for Dispensing and light-class Business. Apply, Mr. Andrews, Chemist, High Street, Croydon.

WANTED, an Assistant; must be a good Counter-man; liberal salary, increasing. Apply, Boutall, Chemist, 52 Marchmont Street.

A N Assistant, about 23 or 24 years old, with Minor qualification, with full particulars, to Glaisyer & Kemp, Brighton.

I MEDIATELY.—Assistant (indoors), who requires time for study. Full particulars, with carte, to 28 Kilburn Lane, Kensal Green.

WANTED immediately, a Junior Assistant; outdoors; quick and money trade. Apply, giving full particulars, to D. P. 131 North End, Croydon.

JUNIOR Assistant, about 22, for a light Retail and Dispensing Business; quick and accurate Dispenser, able to Prescribe and charge occasionally. State age, height, salary, reference, with card when disengaged, to John Lee, Folkestone.

JUNIOR, for Light Retail; short hours; full particulars, with photo (if convenient); applications not answered in four days declined. Ernest Cardwell, Minster Street, Reading.

WANTED, immediately, Apprentice, Turnover, or Improver, for good-class Dispensing Business; no duty after 9 P.M., or on Sundays. Thompson, Pharmaceutical Chemist, Putney, S.W.

IMPROVER or Junior for a light Retail at Ramsgate; indoors; good references indispensable. Apply, stating age, height, salary, &c., with photo, to be returned, to Mr. Knowles, Chemist, Wallington, Surrey.

WANTED, for about a month, young man to represent Wholesale House during illness of traveller. Apply, by letter, to B. E. B., 9 Percy Villas, Church Lane, Willesden, stating age and salary.

WANTED, an energetic Junior, accustomed to a pushing middle-class Retail; a good Salesman and Prescriber; state salary (outdoor), reference, experience, height, and age. "Eta," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

JUNIOR Assistant required, age not under 20, of good business habits, for a light retail; time allowed for study. Apply, stating salary required, age, height, and reference, enclosing carte, to W. Jacobs, Chemist, Medical Hall, Guildford, Surrey.

QUALIFIED Assistant (another kept), with good references and experience, early in June, for about two months; total abstainer preferred. Apply, with full particulars and salary required, to W. Wilson, 80 Lamb's Conduit Street, London, W.C.

WANTED immediately, a qualified Assistant to take partial charge of branch business; a pushing, energetic man; good salesman and tooth extractor. Apply, stating age, height, references, and salary required, to P., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, Junior Assistant; indoors; aged 21 or 22; accustomed to good-class Dispensing Business; one only kept; dwelling-house apart from business. State salary required, references, when at liberty, and usual particulars, to T. Fox, Great Malvern.

A JUNIOR Assistant (to live in), who can extract Teeth, and has been accustomed to a Mixed Country Business; will be required to assist in post office. State age, height, last two engagements, and salary required, and enclose photo, to John Gibson, Chapelton, Sheffield.

JUNIOR Assistant, Minor qualification preferred, on or before June 1st, about 25, for a Retail and Dispensing Business; quick and accurate Dispenser; able to prescribe, and left in charge occasionally. State age, height, salary, reference, with carte, to James Tilson, Long Sutton, Lincolnshire.

WANTED, an experienced Assistant, of good address, and accustomed to a general, good-class Dispensing Retail; three kept; state age, height, reference, and salary required, either indoors or out; applicants not answered in three days declined. H. S. Martin, Chemist and Mineral Water Manufacturer, East Grinstead, Sussex.

WILLIAM HESELTINE & SON, Wilson Street, Finchbury, E.C., are open to engage a first-class man to introduce and appoint Chemists as Agents for their Teas; liberal terms to one having necessary qualifications (see advertisement appearing in this issue). Apply by letter, as above, in first instance.

LEEDS.—Junior wanted for good-class business; must be active, pushing, and not below average height; good address indispensable; state salary required outdoors, and reference to last situation; carte if possible, which would be returned; good opportunity for young man just out of apprenticeship. Reinhardt & Sons, 76 Briggate, Leeds.

GERMAN Hospital, Dalston.—The appointment of Second Dispenser becoming vacant on the 30th June, candidates are requested to send in their applications and testimonials as to qualification and character to the undersigned, on or before Wednesday, the 13th of June; the salary, besides board and lodging, commences at £30 per annum, and will be increased if the candidate appointed gives satisfaction. A. Wallaun, D.D., Hon. Secretary.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

EVENING E. agement; qualified; aged 24. "Associate," 324 Caledonian Road, N.

IMPROVER; 3 years' experience; London preferred. C. T., 131 King's Road, Chelsea.

AS Temporary; qualified; first-class references; disengaged. X., 80 Lumley Road, Skogness.

M. R. SEYMOUR, 37 Milk Street, Bristol, undertakes charge during illness or absence of proprietor.

RETAIL or Wholesale; great experience; good references; married; aged 37. Hambly, 25 Maynard Street, Leicester.

MANAGER or Dispenser, Chemist or Surgeon; temporary or permanent. Dunkerly, M.P.S., 88 Merton Road, Essex Road, Islington, N.

MANAGER or Senior; aged 38; reference first-class. Address, T., 10 Lodge Avenue, Mortlake.

AS Assistant or Traveller; outdoors; good references; aged 25. F. H., Mr. Cheriton, North Street, Bridgewater.

ASSISTANT; aged 22; Minor; town and country experience; good reference. F. B., Birk's Farm, Gillingham, Bradford.

LOCUM-TENENS.—Previous to engaging, write a post-card for terms to "Pharmacy," 7 St. Stephen's Road, Rotherham.

ASSISTANT or Manager for Branch; reference; can dispense, prescribe, extract teeth, &c. Address, "Iodoform," 129 Graham Street, Penrith.

ADVERTISER, used to good-class trade, gives occasional assistance on moderate terms. Mr. Taylor, 30 Devonport Road, Shepherd's Bush.

IMPROVER in Dispensing business; 4 years' experience in mixed business; aged nearly 20; height 5 ft. 9 in.; excellent references. E. Wheelton, Lovely Lane, Warrington.

AS Assistant, unqualified; 20 years thorough General experience; excellent references; aged 34; height 5 ft. 8 in.; single; abstainer; disengaged. "Statin," 162 Windmill Street, Gravesend.

WHOLESALE.—Invoice Clerk, experienced; 5 years in last situation; disengaged. W. M., 2 Kynaston Road, Stoke Newington, London.

DISPENSER to Surgeon or Institution; 7 years' experience; good references; Minor qualification. D., care of Godfrey, 1 High Street, Sittingbourne.

JUNIOR or Dispenser; Minor and Hall qualifications; 8 years' experience; aged 25; height 5 ft. 8 in.; disengaged. W. T., 189 Upper Parliament Street, Liverpool.

ASSISTANT, disengaged, as Dispenser or ordinary Counter-hand, or could manage Branch; excellent references; 8 years' experience. Moore, Main Street, Newmilns, Ayrshire.

AS Junior or Improver, in a Mixed Business preferred; good references; tall; now disengaged. "Statin," 12 Wellington Street, Teignmouth.

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